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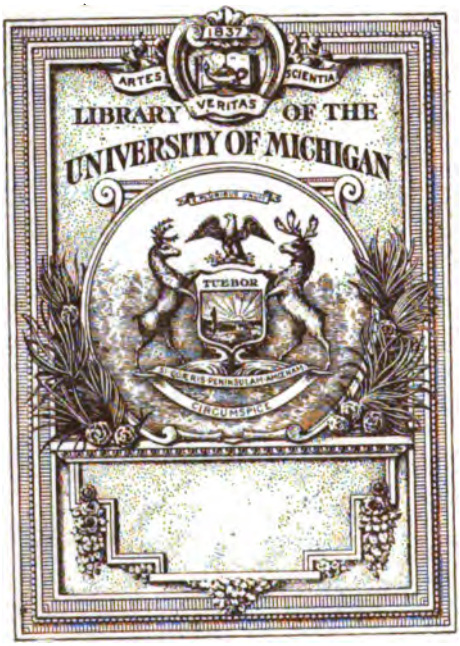
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THE ASSAULT ON THE TREE HOUSE
Page 135

WORKS of JULES VERNE

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INTRODUCTION TO VOLUME THIRTEEN

"THE ROBINSON CRUSOE SCHOOL," published in 1882, classes with "The Tribulations of a Chinaman" as a whimsical fantasy, tossed off by Jules Verne in lighter mood, without either the geographical or the scientific purpose, one of which was usually dominant in his books. He jests good-naturedly here, as indeed he does in several of his later books, with the vast fortunes, the "hundred millions" commonly ascribed to Americans.

What could be more grotesque than the contest of the two San Francisco millionaires for possession of a worthless island, for which neither at the moment has any use? So, too, we have the exaggerated picture of the gilded youth, utterly unacquainted with the stern realities of life, pining to be a Robinson Crusoe on a desert island. The deliberate preparation for him of the uncomfortable situation he has desired, along with all the Crusoe incidents, would have in itself been a merry farce. When to this is added the vengeance of the defeated millionaire, turning loose his monsters also upon the solitude, we get an extravaganza mingled with elements of real danger and excitement such as has been seldom equaled.

"The Star of the South" (1884), takes us back to Africa again; but not to the Africa of Verne's first success "Five Weeks in a Balloon," nor of his tragic slave tale "Dick Sands." Those dealt with the Africa of the negro. This tale is of the Africa of the white man. The diamond region and the diamond mines are fully and closely depicted, so are the rough and hard types of men who make their way there.

Among these is presented, in singular contrast, the edu-

cated young French engineer, a man, a gentleman, and a scientist. Verne has drawn few better characters than this of Victor Cyprien. Though perhaps one may be permitted to suggest that Cyprien's altruism is scarcely convincing. The love which twice surrenders its beloved, rather than transgress the conventions of a social world with which neither lover is any longer associated, seems to us a rather feeble one. The indifference to wealth which, while watching other men gather diamonds all around, can only puzzle over their desire, and be contemptuous of their madness, is as little French as it is American.

The easy deception of the engineer into the idea that he has manufactured a giant diamond, may be accepted by the not too critical reader as the necessary foundation of the story, which is certainly bright, mystifying, and interesting in the extreme. Africa had been treated so seriously in the earlier tales, that one is glad to find Verne here playing with it in the scenes where his people ride ostriches and giraffes. are borne aloft by trapped birds, and leave the manufacture of their artificial diamonds to dodge one another murderously across country.

As to "The Purchase of the North Pole" (1889), or as Verne himself first called it literally "Sense Upside Down," it is a sequel to "A Trip to the Moon," written a quarter century before. In its mathematical sincerity and extravagance of analysis it is worthy of the earlier tale. With his mountains of figures the author deliberately plays a joke upon the trusting reader, by pointing out in the end that the figures are all wrong. In its astronomical suggestiveness and impressive form of conveying instruction, this story is again the equal of its predecessor.

The Robinson Crusoe School

or

A Californian Mystery

CHAPTER I

AN ISLAND FOR SALE

AN island to sell, for cash, to the highest bidder!" said Dean Felporg, the auctioneer, standing behind his rostrum in the room where the conditions of the singular sale were being noisily discussed.

"Island for sale! island for sale!" repeated in shrill tones again and again Gingrass, the crier, who was threading his way in and out of the excited crowd closely packed inside the largest saloon in the auction mart at No. 10 Sacramento Street, in San Francisco.

The crowd consisted not only of a goodly number of Americans from the States of Utah, Oregon, and California, but also of a few Frenchmen, who are quite numerous in the far West.

Mexicans were there enveloped in their sarapes; Chinamen in their large-sleeved tunics, pointed shoes, and conical hats; one or two Kanucks from the coast; and even a sprinkling of Black Feet, Grosventres, or Flatheads, from the banks of the Trinity River.

The scene is in San Francisco, the capital of California, but not at the period when the placer-mining fever was raging—from 1849 to 1852. San Francisco was no longer what it had been then, a caravanserai, a terminus, an inn, where for a night there slept the busy men who were hastening to the gold-fields west of the Sierra Nevada. At the end of some twenty years the

old unknown Yerba-Buena had given place to a town unique of its kind, peopled by 100,000 inhabitants, built under the shelter of a couple of hills, away from the shore, but stretching off to the farthest heights in the background—a city in short which has dethroned Lima, Santiago, Valparaiso, and every other rival, and which the Americans have made the queen of the Pacific, the "glory of the western coast!"

It was the 15th of May, and the weather was still cold. But the cold was hardly noticeable in the thick of the auction crowd. The bell with its incessant clangor had brought together an enormous throng, and quite a summer temperature caused the drops of perspiration to glisten on the foreheads of the spectators.

Do not imagine that all these folks had come to the auction-room with the intention of buying. I might say that all of them had but come to see. Who was going to be mad enough, even if he were rich enough, to purchase an isle of the Pacific, which the government had in some eccentric moment decided to sell? Would the reserve price ever be reached? Could anybody be found to work up the bidding? If not, it would scarcely be the fault of the public crier, who tried his best to tempt buyers by his shoutings and gestures, and the flowery metaphors of his harangue. People laughed at him, but they did not seem much influenced by him.

"An island! an isle to sell!" repeated Gingrass.

"But not to buy!" answered an Irishman, whose pocket did not hold enough to pay for a single pebble.

"An island which at the valuation will not fetch six dollars an acre!" said the auctioneer.

"And which won't pay an eight per cent.!" replied a big farmer, who was well acquainted with agricultural speculations.

"An isle which measures quite sixty-four miles around, and has an area of two hundred and twenty-five thousand acres!"

"Is it solid on its foundation?" asked a Mexican, an old customer at the liquor-bars, whose personal solidity seemed rather doubtful at the moment.

"An isle with forests still virgin!" repeated the crier, "with prairies, hills, watercourses—"

"Warranted?" asked a Frenchman, who seemed rather inclined to nibble.

"Yes! warranted!" added Felporg, much too old at his trade to be moved by the chaff of the public.

"For two years?"

"To the end of the world!"

"Beyond that?"

"A freehold island!" repeated the crier, "an island without a single noxious animal, no wild beasts, no reptiles!—"

"No birds?" added a wag.

"No insects?" inquired another.

"An island for the highest bidder!" said Dean Felporg, beginning again. "Come, gentlemen, come! Have a little courage in your pockets! Who wants an island in perfect state of repair, never been used, an island in the Pacific, that ocean of oceans? The valuation is a mere nothing! It is put at eleven hundred thousand dollars, is there any one will bid? Who speaks first? You, sir?—you, over there, nodding your head like a porcelain mandarin? Here is an island! a really good island! Who says an island?"

"Pass it around!" said a voice, as if they were dealing with a picture or a vase.

And the room shouted with laughter, but not a half-dollar was bid.

However, if the lot could not be passed around, the map of the island was at the public disposal. The whereabouts of the portion of the globe under consideration could be accurately ascertained. There was neither surprise nor disappointment to be feared in that respect. Situation, orientation, outline, altitudes, levels, hydrography, climatology, lines of communication, all these were easily to be verified in advance. People were not buying a pig in a poke, and most undoubtedly there could be no mistake as to the nature of the goods on sale. Moreover, the innumerable journals of the United States, especially those of California, had been for several months directing constant attention to the island whose sale by auction had been authorized by Act of Congress.

The island was Spencer Island, which lies about 460 miles from the Californian coast, in 32° 15′ north latitude,

and 145° 18′ west longitude, reckoning from Greenwich. It would be impossible to imagine a more isolated position, quite out of the way of all maritime or commercial traffic, although Spencer Island was, relatively, not very far off, and situated practically in American waters. But thereabout the regular currents diverging to the north and south have formed a kind of lake of calms, which is sometimes known as the "Whirlpool of Fleurieu."

It is in the center of this enormous eddy, which has hardly an appreciable movement, that Spencer Island is situated. And so it is sighted by very few ships. The main routes of the Pacific, which join the new to the old continent, and lead away to China or Japan, run in a more southerly direction. Sailing-vessels would meet with endless calms in the Whirlpool of Fleurieu; and steamers, which always take the shortest road, would gain no advantage by crossing it. Hence ships of neither class know anything of Spencer Island, which rises above the waters like the isolated summit of one of the submarine mountains of the Pacific. Truly, for a man wishing to flee from the noise of the world, seeking quiet in solitude, what could be better than this island, lost within a few hundred miles of the coast? For a voluntary Robinson Crusoe, it would be the very ideal of its kind! Only of course he must pay for it.

And now, why did the United States desire to part with the island? Was it for some whim? No! A great nation cannot act on caprice in any matter, however simple. The truth was this: situated as it was, Spencer Island had for a long time been known as a station perfectly useless. There could be no practical result from settling there. In a military point of view it was of no importance, for it only commanded an absolutely deserted portion of the Pacific. In a commercial point of view there was a similar want of importance, for the products would not pay the freight either inward or outward. For a criminal colony it was too far from the coast. And to occupy it in any way, would be a very expensive undertaking. So it had remained deserted from time immemorial, and Congress, composed of "eminently practical" men, had resolved to put it up for sale—on one

condition only, and that was, that its purchaser should be a free American citizen. There was no intention of giving away the island for nothing, and so the reserve price had been fixed at $1,100,000. This amount for a financial society dealing with such matters was a mere bagatelle, if the transaction could offer any advantages; but as we need hardly repeat, it offered none, and competent men attached no more value to this detached portion of the United States, than to one of the islands lost beneath the glaciers of the Pole.

In one sense, however, the amount was considerable. A man must be rich to pay for this hobby, for in any case it would not return him a halfpenny per cent. He would even have to be immensely rich for the transaction was to be a "cash" one, and even in the United States it is as yet rare to find citizens with $1,100,000 in their pockets, who would care to throw the amount into the water without hope of return. And Congress had decided not to sell the island under the price. Eleven hundred thousand dollars, not a cent less, or Spencer Island would remain the property of the Union. It was hardly likely that any one would be mad enough to buy it on the terms.

Besides, it was expressly reserved that the proprietor, if one offered, should not become king of Spencer Island, but president of a republic. He would gain no right to have subjects, but only fellow-citizens, who could elect him for a fixed time, and would be free from re-electing him indefinitely. Under any circumstances he was forbidden to play at monarchy. The Union could never tolerate the foundation of a kingdom, no matter how small, in American waters.

This reservation was enough to keep off many an ambitious millionaire, many an aged nabob, who might like to compete with the kings of the Sandwich, the Marquesas, and the other archipelagoes of the Pacific.

In short, for one reason or other, nobody presented himself. Time was getting on, the crier was out of breath in his efforts to secure a buyer, the auctioneer orated without obtaining a single specimen of those nods which his estimable fraternity are so quick to discover: and the reserve price was not even mentioned.

However, if the hammer was not wearied with oscillat-

ing above the rostrum, the crowd was not wearied with waiting around it. The joking continued to increase, and the chaff never ceased for a moment. One individual offered two dollars for the island, costs included. Another said that a man ought to be paid for taking it.

And all the time the crier was heard. "An island to sell! an island for sale!" And there was no one to buy it.

"Will you guarantee that there are flats there?" said Stumpy, the grocer of Merchant Street, alluding to the deposits so famous in alluvial gold-mining.

"No," answered the auctioneer, "but it is not impossible that there are, and the State abandons all its rights over the gold lands."

"Haven't you got a volcano?" asked Oakhurst, the barkeeper of Montgomery Street.

"No volcanoes," replied Dean Felporg, "if there were, we could not sell at this price!"

An immense shout of laughter followed.

"An island to sell! an island for sale!" yelled Gingrass, whose lungs tired themselves to no purpose.

"Only a dollar! only a half-dollar! only a cent above the reserve!" said the auctioneer for the last time, "and I will knock it down! Once! Twice!"

Perfect silence.

"If nobody bids we must put the lot back! Once! Twice!—"

"Twelve hundred thousand dollars!"

The four words rang through the room like four shots from a revolver. The crowd, suddenly speechless, turned toward the bold man who had dared to bid. It was William W. Kolderup, of San Francisco.

CHAPTER II

THE ISLAND BOUGHT

A MAN extraordinarily rich, who counted dollars by the million as other men do by the thousand; such was William W. Kolderup.

People said he was richer than the Duke of Westminster, whose income is some $4,000,000 a year, and who can spend his $10,000 a day, or seven dollars every

minute; richer than Senator Jones, of Nevada, who has $35,000,000 in the funds; richer than Mr. Mackay himself, whose annual $13,750,000 give him $1,560 per hour, or half-a-dollar to spend every second of his life. I do not mention such minor millionaires as the Rothchilds, the Vanderbilts, the Duke of Northumberland, or the Stewarts, or the directors of the powerful bank of California, and other opulent personages of the old and new worlds whom William W. Kolderup would have been able to comfortably pension. He could, without inconvenience, have given away a million just as you and I might give away a shilling.

It was in developing the early placer-mining enterprises in California that our worthy speculator had laid the solid foundations of his incalculable fortune. He was the principal associate of Captain Sutter, the Swiss, in the localities, where, in 1848, the first traces were discovered. Since then, luck and shrewdness combined had helped him on, and he had interested himself in all the great enterprises of both worlds. He threw himself boldly into commercial and industrial speculations. His inexhaustible funds were the life of hundreds of factories, his ships were on every sea. His wealth increased not in arithmetical but in geometrical progression. People spoke of him as one of those few "milliardaires" who never know how much they are worth. In reality he knew almost to a dollar, but he never boasted of it.

At this very moment when we introduce him to our readers with all the consideration such a many-sided man merits, William W. Kolderup had 2000 branch offices scattered over the globe, 80,000 employes in America, Europe, and Australia, 300,000 correspondents, a fleet of 500 ships which continually plowed the ocean for his profit, and he was spending not less than a million a year in bill-stamps and postages. In short, he was the honor and glory of opulent Frisco—the nickname familiarly given by the Americans to the Californian capital.

A bid from William W. Kolderup could not but be a serious one. And when the crowd in the auction room had recognized who it was that by $100,000 had capped the reserve price of Spencer Island, there was an irresistible sensation, the chaffing ceased instantly, jokes gave

place to interjections of admiration, and cheers resounded through the saloon. Then a deep silence succeeded the hubbub, eyes grew bigger, and ears opened wider. For our part had we been there we would have had to hold our breath that we might lose nothing of the exciting scene which would follow should any one dare to bid against William W. Kolderup.

But was it probable? Was it even possible?

No! And at the outset it was only necessary to look at William W. Kolderup to feel convinced that he could never yield on a question where his financial gallantry was at stake. He was a big, powerful man, with huge head, large shoulders, well-built limbs, firmly knit, and tough as iron. His quiet but resolute look was not willingly cast downward, his gray hair, brushed up in front, was as abundant as if he were still young. The straight lines of his nose formed a geometrically-drawn right-angled triangle. No mustache; his beard cut in Yankee fashion bedecked his chin, and the two upper points met at the opening of the lips and ran up to the temples in pepper-and-salt whiskers; teeth of snowy whiteness were symmetrically placed on the borders of a clean-cut mouth. The head of one of those true kings of men who rise in the tempest and face the storm. No hurricane could bend that head, so solid was the neck which supported it. In these battles of the bidders each of its nods meant an additional hundred thousand dollars.

There was no one to dispute with him.

"Twelve hundred thousand dollars—twelve hundred thousand!" said the auctioneer, with that peculiar accent which men of his vocation find most effective.

"Going at twelve hundred thousand dollars!" repeated Gingrass the crier.

"You could safely bid more than that," said Oakhurst, the bar-keeper; "William Kolderup will never give in."

"He knows no one will chance it," answered the grocer from Merchant Street.

Repeated cries of "Hush!" told the two worthy tradesmen to be quiet. All wished to hear. All hearts palpitated. Dare any one raise his voice in answer to the voice of William W. Kolderup? He, magnificent to look upon, never moved. There he remained as calm as if the

matter had no interest for him. But—and this those near to him noticed—his eyes were like revolvers loaded with dollars, ready to fire.

"Nobody speaks?" asked Dean Felporg.

Nobody spoke.

"Once! Twice!"

"Once! Twice!" repeated Gingrass, quite accustomed to this little dialogue with his chief.

"Going!"

"Going!"

"For twelve—hundred—thousand—dollars—Spencer—Island—com—plete!"

The waistcoats rose and fell convulsively. Could it be possible that at the last second a higher bid would come? Felporg with his right hand stretched on the table was shaking his ivory hammer—one rap, two raps, and the deed would be done. The public could not have been more absorbed in the face of a summary application of the law of Justice Lynch!

The hammer slowly fell, almost touched the table, rose again, hovered an instant like a sword which pauses ere the drawer cleaves the victim in twain; then it flashed swiftly downward.

But before the sharp rap could be given, a voice was heard: "Thirteen—hundred—thousand—dollars!"

There was a preliminary "Ah!" of general stupefaction, then a second "Ah!" of not less general satisfaction. Another bidder had presented himself! There was going to be a fight after all!

But who was the reckless individual who had dared to come to dollar strokes with William W. Kolderup of San Francisco? It was J. R. Taskinar, of Stockton.

J. R. Taskinar was rich, but he was more than proportionately fat. He weighed 490 lbs. If he had only run second in the last fat-man show at Chicago, it was because he had not been allowed time to finish his dinner, and had lost about a dozen pounds.

This colossus, who had had to have special chairs made for his portly person to rest upon, lived at Stockton, on the San Joachim. Stockton is one of the most important cities in California, one of the depot centers for the mines of the south, the rival of Sacramento, the center

for the mines of the north. There the ships embark the largest quantity of Californian corn.

Not only had the development of the mines and speculations in wheat furnished J. R. Taskinar with the occasion of gaining an enormous fortune, but petroleum, like another Pactolus, had run through his treasury. Besides, he was a great gambler, a lucky gambler, and he had found "poker" most prodigal of its favors to him.

But if he was a Crœsus, he was also a rascal; and no one would have addressed him as "honorable," although the title in those parts is so much in vogue. After all, he was a good war-horse, and perhaps more was put on his back than was justly his due. One thing was certain, and that was that on many an occasion he had not hesitated to use his "Derringer"—the Californian revolver.

Now J. R. Taskinar particularly detested William W. Kolderup. He envied him for his wealth, his position, and his reputation. He despised him as a fat man despises a lean one. It was not the first time that the merchant of Stockton had endeavored to do the merchant of San Francisco out of some business or other, good or bad, simply owing to a feeling of rivalry. William W. Kolderup thoroughly knew his man, and on all occasions treated him with scorn enough to drive him to distraction.

The last success which J. R. Taskinar could not forgive his opponent was that gained in the struggle over the state elections. Notwithstanding his efforts, his threats, and his libels, not to mention the millions of dollars squandered by his electoral courtiers, it was William W. Kolderup who sat in his seat in the Legislative Council of Sacramento.

J. R. Taskinar had learned—how, I cannot tell—that it was the intention of William W. Kolderup to acquire possession of Spencer Island. This island seemed doubtless as useless to him as it did to his rival. No matter. Here was another chance for fighting, and perhaps for conquering. J. R. Taskinar would not allow it to escape him.

And that is why J. R. Taskinar had come to the auction room among the curious crowd who could not be aware of his designs, why at all points he had prepared his batteries, why before opening fire, he had waited till his

opponent had covered the reserve and why when William W. Kolderup had made his bid of "Twelve hundred thousand dollars!" J. R. Taskinar at the moment when William W. Kolderup thought he had definitely secured the island, woke up with the words shouted in stentorian tones,—

"Thirteen hundred thousand dollars!"

Everybody as we have seen turned to look at him.

"Fat Taskinar!" The name passed from mouth to mouth. Yes. Fat Taskinar! He was known well enough! His corpulence had been the theme of many an article in the journals of the Union. I am not quite sure which mathematician it was who had demonstrated by transcendental calculations, that so great was his mass that it actually influenced that of our satellite and in an appreciable manner disturbed the elements of the lunar orbit.

But it was not J. R. Taskinar's physical composition which interested the spectators in the room. It was something far different which excited them; it was that he had entered into direct public rivalry with William W. Kolderup. It was a fight of heroes, dollar versus dollar, which had opened, and I do not know which of the two coffers would turn out to be best lined. Enormously rich were both these mortal enemies! After the first sensation, which was rapidly suppressed, renewed silence fell on the assembly. You could have heard a spider weaving his web.

It was the voice of Dean Felporg which broke the spell.

"For thirteen hundred thousand dollars, Spencer Island!" declaimed he, drawing himself up so as to better command the circle of bidders.

William W. Kolderup had turned towards J. R. Taskinar. The bystanders moved back, so as to allow the adversaries to behold each other. The man of Stockton and the man of San Francisco were face to face, mutually staring, at their ease. Truth compels me to state that they made the most of the opportunity. Never would one of them consent to lower his eyes before those of his rival.

"Fourteen hundred thousand dollars," said William W. Kolderup.

"Fifteen hundred thousand!" retorted J. R. Taskinar.

"Sixteen hundred thousand!"

"Seventeen hundred thousand!"

Have you ever heard the story of the two mechanics of Glasgow, who tried which should raise the other highest up the factory chimney at the risk of a catastrophe? The only difference was that here the chimney was of ingots of gold.

Each time after the capping bid of J. R. Taskinar, William W. Kolderup took a few moments to reflect before he bid again. On the contrary Taskinar burst out like a bomb, and did not seem to require a second to think.

"Seventeen hundred thousand dollars!" repeated the auctioneer. "Now, gentlemen, that is a mere nothing! It is giving it away!"

And one can well believe that, carried away by the jargon of his profession, he was about to add, "The frame alone is worth more than that!" When—

"Eighteen hundred thousand!" replied William W. Kolderup.

"Nineteen hundred thousand!" retorted J. R. Taskinar.

"Two millions!" quoth William W. Kolderup, and so quickly that this time he evidently had not taken the trouble to think. His face was a little pale when these last words escaped his lips, but his whole attitude was that of a man who did not intend to give in.

J. R. Taskinar was simply on fire. His enormous face was like one of those gigantic railway bull's-eyes which, screened by the red, signal the stoppage of the train. But it was highly probable that his rival would disregard the block, and decline to shut off steam.

This J. R. Taskinar felt. The blood mounted to his brows, and seemed apoplectically congested there. He wriggled his fat fingers, covered with diamonds of great price, along the huge gold chain attached to his chronometer. He glared at his adversary, and then shutting his eyes so as to open them with a more spiteful expression a moment afterward, "Two millions, four hundred thousand dollars!" he remarked, hoping by this tremendous leap to completely rout his rival.

"Two millions, seven hundred thousand!" replied William W. Kolderup in a peculiarly calm voice.

"Two millions, eight hundred thousand!"

"Three millions!"

Yes! William W. Kolderup, of San Francisco, said three millions of dollars!

Applause rang through the room, hushed, however, at the voice of the auctioneer, who repeated the bid, and whose oscillating hammer threatened to fall in spite of himself by the involuntary movement of his muscles. It seemed as though Dean Felporg, surfeited with the surprises of public auction sales, would be unable to contain himself any longer. All glances were turned on J. R. Taskinar. That voluminous personage was sensible of this, but still more was he sensible of the weight of these three millions of dollars, which seemed to crush him. He would have spoken, doubtless to bid higher—but he could not. He would have liked to nod his head—he could do so no more.

After a long pause, however, his voice was heard; feeble it is true, but sufficiently audible. "Three millions, five hundred thousand!"

"Four millions," was the answer of William W. Kolderup. It was the last blow of the bludgeon. J. R. Taskinar succumbed. The hammer gave a hard rap on the marble table and—

Spencer Island fell for four millions of dollars to William W. Kolderup, of San Francisco.

"I will be avenged!" muttered J. R. Taskinar, and throwing a glance of hatred at his conqueror, he returned to the Occidental Hotel.

But "hip, hip, hurrah," three times thrice, smote the ears of William W. Kolderup, then cheers followed him to Montgomery Street, and such was the delirious enthusiasm of the Americans that they even forgot to favor him with the customary bars of "Yankee Doodle."

CHAPTER III

WITH PIANO ACCOMPANIMENT

WILLIAM W. KOLDERUP had returned to his mansion in Montgomery Street. This thoroughfare is the Regent Street, the Broadway, the Boulevard des Italiens of San Francisco. Throughout its length, the great artery which crosses the city parallel with its quays is astir with life and movement; trams there are innumerable; carriages with horses, carriages with mules; men bent on business, hurrying to and fro over its stone pavements, past shops thronged with customers; men bent on pleasure, crowding the doors of the "bars," where at all hours are dispensed the Californian's drinks.

There is no need for us to describe the mansion of a Frisco nabob. With so many millions, there was proportionate luxury. More comfort than taste. Less of the artistic than the practical. One cannot have everything. So the reader must be contented to know that there was a magnificent reception-room, and in this reception-room a piano, whose chords were permeating the mansion's warm atmosphere when the opulent Kolderup walked in.

"Good!" he said. "She and he are there! A word to my cashier, and then we can have a little chat."

And he stepped toward his office to arrange the little matter of Spencer Island, and then dismiss it from his mind. He had only to realize a few certificates in his portfolio and the acquisition was settled for. Half-a-dozen lines to his broker—no more. Then William W. Kolderup devoted himself to another "combination" which was much more to his taste.

Yes! she and he were in the drawing-room—she, in front of the piano; he, half reclining on the sofa, listening vaguely to the pearly arpeggios which escaped from the fingers of the charmer. "Are you listening?" she said.

"Of course."

"Yes! but do you understand it?"

"Do I understand it, Phina! Never have you played those 'Auld Robin Gray' variations more superbly."

"But it is not 'Auld Robin Gray,' Godfrey; it is 'Happy Moments.'"

"Oh! ah! yes! I remember!" answered Godfrey, in a tone of indifference which it was difficult to mistake. The lady raised her two hands, held them suspended for an instant above the keys as if they were about to grasp another chord, and then with a half-turn on her music stool she remained for a moment looking at the too tranquil Godfrey, whose eyes did their best to avoid hers.

Phina Hollaney was the goddaughter of William W. Kolderup. An orphan, he had educated her, and given her the right to consider herself his daughter, and to love him as her father. She wanted for nothing. She was young, "handsome in her way" as people say, but undoubtedly fascinating; a blonde of sixteen with the ideas of a woman much older, as one could read in the crystal of her blue-black eyes. Of course, we must compare her to a lily, for all beauties are compared to lilies in the best of American society. She was then a lily, but a lily grafted into an eglantine. She certainly had plenty of spirit, but she had also plenty of practical common-sense, a somewhat selfish demeanor, and but little sympathy with the illusions and dreams so characteristic of her sex and age.

Her dreams were when she was asleep, not when she was awake. She was not asleep now, and had no intention of being so. "Godfrey?" she continued.

"Phina?" answered the young man.

"Where are you now?"

"Near you—in this room—"

"Not near me, Godfrey! Not in this room! But far, far away, over the seas, is it not so?"

And mechanically Phina's hand sought the key-board and rippled along a series of sinking sevenths, which spoke of a plaintive sadness, unintelligible perhaps to the nephew of William W. Kolderup.

For such was this young man, such was the relationship he bore toward the master of the house. The son of a sister of this buyer of islands, fatherless and motherless for a good many years, Godfrey Morgan, like Phina, had been brought up in the house of his uncle, in whom

the fever of business had still left a place for the idea of marrying these two to each other.

Godfrey was in his twenty-second year. His education now finished, had left him with absolutely nothing to do. He had graduated at the University, but had found it of little use. For him life opened out but paths of ease; go where he would, to the right or the left, whichever way he went, fortune would not fail him.

Godfrey was of good presence, gentlemanly, elegant—never tying his cravat in a ring, nor starring his fingers, his wrists or his shirt-front with those jeweled gimcracks so dear to his fellow-citizens.

I shall surprise no one in saying that Godfrey Morgan was going to marry Phina Hollaney. Was he likely to do otherwise? All the proprieties were in favor of it. Besides, William W. Kolderup desired the marriage. The two people whom he loved most in this world were sure of a fortune from him, without taking into consideration whether Phina cared for Godfrey, or Godfrey cared for Phina. It would also simplify the bookkeeping of the commercial house. Ever since their births an account had been opened for the boy, another for the girl. It would then be only necessary to rule these off and transfer the balances to a joint account for the young couple. The worthy merchant hoped that this would soon be done, and the balances struck without error or omission.

But it is precisely that there had been an omission and perhaps an error that we are about to show. An error, because at the outset Godfrey felt that he was not yet old enough for the serious undertaking of marriage; an omission, because he had not been consulted on the subject.

In fact, when he had finished his studies Godfrey had displayed a quite premature indifference to the world, in which he wanted for nothing, in which he had no wish remaining ungratified, and nothing whatever to do. The thought of traveling around the world was always present to him. Of the old and new continents he knew but one spot—San Francisco, where he was born, and which he had never left except in a dream. What harm was there in a young man making a tour of the globe

twice or thrice—especially if he were an American? Would it do him any good? Would he learn anything in the different adventures he would meet with in a voyage of any length? If he were not already satiated with a life of adventure, how could he be answered? Finally, how many millions of leagues of observation and instruction were indispensable for the completion of the young man's education?

Things had reached this pass; for a year or more Godfrey had been immersed in books of voyages of recent date, and had passionately devoured them. He had discovered the Celestial Empire with Marco Polo, America with Columbus, the Pacific with Cook, the South Pole with Dumont d'Urville. He had conceived the idea of going where these illustrious travelers had been without him. In truth, he would not have considered an exploring expedition of several years to cost him too dear at the price of a few attacks of Malay pirates, several ocean collisions, and a shipwreck or two on a desert island where he could live the life of a Selkirk or a Robinson Crusoe! A Crusoe! To become a Crusoe! What young imagination has not dreamed of this in reading, as Godfrey had often, too often done, the adventures of the imaginary heroes of Daniel de Foe and De Wyss?

Yes! The nephew of William W. Kolderup was in this state when his uncle was thinking of binding him in the chains of marriage. To travel in this way with Phina, then become Mrs. Morgan, would be clearly impossible! He must go alone or leave it alone. Besides, once his fancy had passed away, would not she be better disposed to sign the settlements? Was it for the good of his wife that he had not been to China or Japan, not even to Europe? Decidedly not.

And hence it was that Godfrey was now absent in the presence of Phina, indifferent when she spoke to him, deaf when she played the airs which used to please him; and Phina, like a thoughtful, serious girl, soon noticed this. To say that she did not feel a little annoyance, mingled with some chagrin, is to do her a gratuitous injustice. But accustomed to look things in the face, she had reasoned thus: "If we must part, it had better be before marriage than afterward!"

And thus it was that she had spoken tc Godfrey in these significant words: "No! you are not near me at this moment—you are beyond the seas!"

Godfrey had risen. He had walked a few steps without noticing Phina, and unconsciously his index finger touched one of the keys of the piano. A loud C♯ of the octave below the staff, a note dismal enough, answered for him.

Phina had understood him and without more discussion was about to bring matters to a crisis, when the door of the room opened.

William W. Kolderup appeared, seemingly a little preoccupied as usual. Here was the merchant who had just finished one negotiation and was about to begin another. "Well," said he, "there is nothing more now than for us to fix the date."

"The date?" answered Godfrey, with a start. "What date, if you please, uncle?"

"The date of your wedding!" said William W. Kolderup. "Not the date of mine, I suppose!"

"Perhaps that is more urgent?" said Phina.

"Hey?—what?" exclaimed the uncle—"what does that matter? We are only talking of current affairs, are we not?"

"Godfather Will," answered the lady. "It is not of a wedding that we are going to fix the date today, but of a departure."

"A departure!"

"Yes, the departure of Godfrey," continued Phina, "of Godfrey who, before he gets married, wants to see a little of the world!"

"You want to go away—you?" said William W. Kolderup, stepping toward the young man and raising his arms as if he were afraid that this "rascal of a nephew" would escape him.

"Yes; I do, uncle," said Godfrey gallantly.

"And for how long?"

"For eighteen months, or two years, or more if—

"If—"

"If you will let me, and Phina will wait for me."

"Wait for you! An intended who intends until he gets away!" exclaimed William W. Kolderup.

"You must let Godfrey go," pleaded Phina; "I have thought it carefully over. I am young, but really Godfrey is younger. Travel will age him, and I do not think it will change his taste! He wishes to travel, let him travel! The need of repose will come to him afterward, and he will find me when he returns."

"What!" exclaimed William W. Kolderup, "you consent to give your bird his liberty?"

"Yes, for the two years he asks."

"And you will wait for him?"

"Uncle Will, if I could not wait for him I could not love him!" and so saying, Phina returned to the piano, and whether she willed it or no, her fingers softly played a portion of the then fashionable "Départ du Fiancé," which was very appropriate under the circumstances. But Phina, without perceiving it perhaps, was playing in "A minor," whereas it was written in "A major," and all the sentiment of the melody was transformed, and its plaintiveness chimed in well with her hidden feelings.

But Godfrey stood embarrassed, and said not a word. His uncle took him by the head and turning it to the light looked fixedly at him for a moment or two. In this way he questioned him without having to speak, and Godfrey was able to reply without having occasion to utter a syllable.

And the lamentations of the "Départ du Fiancé" continued their sorrowful theme, and then William W. Kolderup, having made the turn of the room, returned to Godfrey, who stood like a criminal before the judge. Then raising his voice, "You are serious?" he asked.

"Quite serious!" interrupted Phina, while Godfrey contented himself with making a sign of affirmation.

"You want to try traveling before you marry Phina? Well! You shall try it, my nephew!"

He made two or three steps and stopping with crossed arms before Godfrey, asked, "Where do you want to go?"

"Everywhere."

And when do you want to start?"

"When you please, Uncle Will."

"All right," replied William W. Kolderup, fixing a curious look on his nephew. Then he muttered between his teeth, "The sooner the better."

At these last words came a sudden interruption from Phina. The little finger of her left hand touched a G♯, and the fourth had, instead of falling on the key-note, rested on the "sensible," like Ralph in the "Huguenots," when he leaves at the end of his duet with Valentine.

Perhaps Phina's heart was nearly full, she had made up her mind to say nothing.

It was then that William W. Kolderup, without noticing Godfrey, approached the piano. "Phina," said he gravely, "you should never remain on the 'sensible'!"

With the tip of his large finger he dropped vertically on to one of the keys, and an "A natural" resounded through the room.

CHAPTER IV

T. ARTELETT, OTHERWISE TARTLET

If T. Artelett had been a Parisian, his compatriots would not have failed to nickname him Tartlet, but as he had already received this title we do not hesitate to describe him by it. If Tartlet was not a Frenchman he ought to have been one.

In his "Itinéraire de Paris à Jérusalem," Chateaubriand tells of a little man "powdered and frizzed in the old-fashioned style, with a coat of apple green, a waistcoat of drouget, shirt-frill and cuffs of muslin, who scraped a violin and made the Iroquois dance 'Madeleine Friquet.'"

The Californians are not Iroquois, far from it; but Tartlet was none the less professor of dancing and deportment in the capital of their state. If they did not pay him for his lessons, as they had his predecessor in beaver-skins and bear-hams, they did so in dollars. If in speaking of his pupils he did not talk of the "bucks and their squaws," it was because his pupils were highly civilized, and because in his opinion he had contributed considerably to their civilization.

Tartlet was a bachelor, and aged about forty-five at the time we introduce him to our readers. Though for a dozen years or so his marriage with some lady of mature age had been expected to take place.

Under present circumstances it is perhaps advisable to give "two or three lines" concerning his age, appearance and position in life. He was born on the 17th of July, 1835, at a quarter-past three in the morning. His height is five feet, two inches, three lines. His weight, increased by some six pounds during the last year, is one hundred and fifty-one pounds, two ounces. He has an oblong head. His hair, very thin above the forehead, is gray chestnut, his forehead is high, his face oval, his complexion fresh colored. His eyes—sight excellent—a grayish brown, eyelashes and eyebrows clear chestnut, eyes themselves somewhat sunk in their orbits beneath the arches of the brows. His nose is of medium size, and has a slight indentation toward the end of the left nostril. His cheeks and temples are flat and hairless. His ears are large and flat. His mouth, of middling size, is absolutely free from bad teeth. His lips, thin and slightly pinched, are covered with a heavy mustache and imperial, his chin is round and also shaded with a many-tinted beard. A small mole ornaments his plump neck—in the nape. Finally, when he is in the bath it can be seen that his skin is white and smooth.

His life is calm and regular. Without being robust, thanks to his great temperance, he has kept his health uninjured since his birth. His lungs are rather irritable, and hence he has not contracted the bad habit of smoking. He drinks neither spirits, coffee, liquors, nor neat wine. In a word, all that could prejudicially affect his nervous system is vigorously excluded from his table. Light beer, and weak wine and water are the only beverages he can take without danger. It is on account of his carefulness that he has never had to consult a doctor since his life began.

His gesture is prompt, his walk quick, his character frank and open. His thoughtfulness for others is extreme, and it is on account of this that in the fear of making his wife unhappy, he has never entered into matrimony.

Such would have been the report furnished by Tartlet, but desirable as he might be to a lady of a certain age, the projected union had hitherto failed. The professor remained a bachelor, and continued to give lessons in dancing and deportment.

It was in this capacity that he entered the mansion of William W. Kolderup. As time rolled on his pupils gradually abandoned him, and he ended by becoming one wheel more in the machinery of the wealthy establishment.

After all, he was a brave man, in spite of his eccentricities. Everybody liked him. He liked Godfrey, he liked Phina, and they liked him. He had only one ambition in the world, and that was to teach them all the secrets of his art, to make them in fact, as far as deportment was concerned, two highly accomplished individuals.

Now, what would you think? It was he, this Professor Tartlet, whom William W. Kolderup had chosen as his nephew's companion during the projected voyage. Yes! He had reason to believe that Tartlet had not a little contributed to imbue Godfrey with this roaming mania, so as to perfect himself by a tour around the world. William W. Kolderup had resolved that they should go together. On the morrow, the 16th of April, he sent for the professor to his office.

The request of the nabob was an order for Tartlet. The professor left his room, with his pocket violin—generally known as a kit—so as to be ready for all emergencies. He mounted the great staircase of the mansion with his feet academically placed as was fitting for a dancing-master; knocked at the door of the room, entered—his body half inclined, his elbows rounded, his mouth on the grin—and waited in the third position, after having crossed his feet one before the other, at half their length, his ankles touching and his toes turned out. Any one but Professor Tartlet placed in this sort of unstable equilibrium would have tottered on his base, but the professor preserved an absolute perpendicularity.

"Mr. Tartlet," said William W. Kolderup, "I have sent for you to tell you some news which I imagine will rather surprise you."

"As you think best!" answered the professor.

"My nephew's marriage is put off for a year or eighteen months, and Godfrey, at his own request, is going to visit the different countries of the old and new world."

"Sir," answered Tartlet, "my pupil, Godfrey, will do honor to the country of his birth, and—"

"And, to the professor of deportment who has initiated him into etiquette," interrupted the merchant, in a tone of which the guileless Tartlet failed to perceive the irony.

In fact, thinking it the correct thing to execute an "assemblée," he first moved one foot and then the other, by a sort of semi-circular side slide, and then with a light and graceful bend of the knee, he bowed to William W. Kolderup.

"I thought," continued the latter, "that you might feel a little regret at separating from your pupil?"

"The regret will be extreme," answered Tartlet, "but should it be necessary—"

"It is not necessary," answered William W. Kolderup, knitting his bushy eyebrows.

"Ah!" replied Tartlet. Slightly troubled, he made a graceful movement to the rear, so as to pass from the third to the fourth position; but he left the breadth of a foot between his feet, without perhaps being conscious of what he was doing.

"Yes!" added the merchant in a peremptory tone, which admitted not of the ghost of a reply; "I have thought it would really be cruel to separate a professor and a pupil so well made to understand each other!"

"Assuredly!—the journey?" answered Tartlet, who did not seem to want to understand.

"Yes! Assuredly!" replied William W. Kolderup; "not only will his travels bring out the talents of my nephew, but the talents of the professor to whom he owes so correct a bearing."

Never had the thought occurred to this great baby that one day he would leave San Francisco, California, America, to roam the seas. Such an idea had never entered the brain of a man more absorbed in choregraphy than geography, and who was still ignorant of the suburbs of the capital beyond ten miles radius. And now this was offered to him. He was to understand that *nolens volens* he was to expatriate himself, he himself was to experience with all their costs and inconveniences the very adventures he had recommended to his pupil! Here, decidedly, was something to trouble a brain much more solid than his, and the unfortunate Tartlet for the first time in his life felt an involuntary

yielding in the muscles of his limbs, suppled as they were by thirty-five years' exercise.

"Perhaps," said he, trying to recall to his lips the stereotyped smile of the dancer which had left him for an instant—"perhaps—and am I not—"

"You will go!" answered William W. Kolderup like a man with whom discussion was useless.

To refuse was impossible. Tartlet did not even think of such a thing. What was he in the house? A thing, a parcel, a package to be sent to every corner of the world. "And when am I to start?" demanded he, trying to get back into an academical position.

"In a month."

"And on what raging ocean has Mr. Kolderup decided that his vessel should bear his nephew and me?"

"The Pacific, at first."

"And on what point of the terrestrial globe shall I first set foot?"

"On the soil of New Zealand," answered William W. Kolderup; "I have remarked that the New Zealanders always stick their elbows out! Now you can teach them to turn them in!"

And thus was Professor Tartlet selected as the traveling-companion of Godfrey Morgan.

A nod from the merchant gave him to understand that the audience had terminated. He retired, considerably agitated, and the performance of the special graces which he usually displayed in this difficult act left a good deal to be desired. In fact, for the first time in his life, Professor Tartlet, forgetting in his preoccupation the most elementary principles of his art, went out with his toes turned in.

CHAPTER V
A STOWAWAY

THE voyage had begun. There had not been much difficulty so far, it must be admitted.

Professor Tartlet, with incontestable logic, often repeated, "Any voyage can begin! But where and how it finishes is the important point."

The cabin occupied by Godfrey was below the poop of the *Dream* and opened on to the dining-saloon. Our young traveler was lodged there as comfortably as possible. He had given Phina's photograph the best place on the best lighted panel of his room. A cot to sleep on, a lavatory for toilet purposes, some chests of drawers for his clothes and his linen, a table to work at, an armchair to sit upon, what could a young man in his twenty-second year want more? Under such circumstances he might have gone twenty-two times around the world! Was he not at the age of that practical philosophy which consists in good health and good humor? Ah! young people, travel if you can, and if you cannot—travel all the same!

Tartlet was not in a good humor. His cabin, near that of his pupil, seemed to him too narrow, his bed too hard, the six square yards which he occupied quite insufficient for his steps and strides. Would not the traveler in him absorb the professor of dancing and deportment? No! It was in the blood, and when Tartlet reached the hour of his last sleep his feet would be found placed in a horizontal line with the heels one against the other, in the first position.

Meals were taken in common. Godfrey and Tartlet sat opposite to each other, the captain and mate occupying each end of the rolling table. This alarming appellation, the "rolling table," is enough to warn us that the professor's place would too often be vacant.

At the start in the lovely month of June, there was a beautiful breeze from the north-east, and Captain Turcott was able to set his canvas so as to increase his speed. The *Dream* thus balanced hardly rolled at all, and as the waves followed her, her pitching was but slight. This mode of progressing was not such as to affect the looks of the passengers and give them pinched noses, hollow eyes, livid foreheads, or colorless cheeks. It was supportable. They steered south-west over a splendid sea, hardly lifting in the least, and the American coast soon disappeared below the horizon.

For two days nothing occurred worthy of mention. The *Dream* made good progress. The commencement of the voyage promised well—so that Captain Turcott seemed occasionally to feel an anxiety which he tried in vain to

hide. Each day as the sun crossed the meridian he carefully took his observations. But it could be noticed that immediately afterward he retired with the mate into his cabin, and then they remained in secret conclave as if they were discussing some grave eventuality. This performance passed probably unnoticed by Godfrey, who understood nothing about the details of navigation, but the boatswain and the crew seemed somewhat astonished at it, particularly as for two or three times during the first week, when there was not the least necessity for the maneuver, the course of the *Dream* at night was completely altered, and resumed again in the morning. In a sailing-ship this might be intelligible; but in a steamer, which could keep on the great circle line and only use canvas when the wind was favorable, it was somewhat extraordinary.

During the morning of the 12th of June a very unexpected incident occurred on board.

Captain Turcott, the mate, and Godfrey, were sitting down to breakfast when an unusual noise was heard on deck. Almost immediately afterward the boatswain opened the door and appeared on the threshold.

"Captain!" he said.

"What's up?" asked Turcott, sailor as he was, always on the alert.

"Here's a—Chinee!" said the boatswain.

"A Chinese!"

"Yes! a genuine Chinese we have just found by chance at the bottom of the hold!"

"At the bottom of the hold!" exclaimed Turcott. "Well, by all the—somethings—of Sacramento, just send him to the bottom of the sea!"

"All right!" answered the boatswain.

And that excellent man with all the contempt of a Californian for a son of the Celestial Empire, taking the order as quite a natural one, would have had not the slightest compunction in executing it.

However, Captain Turcott rose from his chair, and followed by Godfrey and the mate, left the saloon and walked toward the forecastle of the *Dream*.

There stood a Chinaman, tightly handcuffed, and held by two or three sailors, who were by no means sparing of

their nudges and knocks. He was a man of from five-and-thirty to forty, with intelligent features, well built, of lithe figure, but a little emaciated, owing to his sojourn for sixty hours at the bottom of a badly ventilated hold.

Captain Turcott made a sign to his men to leave the unhappy intruder alone.

"Who are you?" he asked.

"A son of the sun."

"And what is your name?"

"Seng Vou," answered the Chinese, whose name in the Celestial language signifies "he who does not live."

"And what are you doing on board here?"

"I am out for a sail!" coolly answered Seng Vou, "but am doing you as little harm as I can."

"Really! as little harm!—and you stowed yourself away in the hold when we started?"

"Just so, captain."

"So that we might take you for nothing from America to China, on the other side of the Pacific?"

"If you will have it so."

"And if I don't wish to have it so, you yellow-skinned nigger. If I will have it that you have to swim to China?"

"I will try," said the Chinaman with a smile, "but I shall probably sink on the road!"

"Well, John," exclaimed Captain Turcott, "I am going to show you how to save your passage-money."

And Captain Turcott, much more angry than circumstances necessitated, was perhaps about to put his threat into execution, when Godfrey intervened.

"Captain," he said, "one more Chinee on board the *Dream* is one Chinee less in California, where there are too many."

"A great deal too many!" answered Captain Turcott.

"Yes, too many. Well, if this poor beggar wishes to relieve San Francisco of his presence, he ought to be pitied! Bah! we can throw him on shore at Shanghai! and there needn't be any fuss about it!"

There is no reason why we should conceal the fact—Seng Vou belonged to a Chinese actors' troupe, in which he filled the rôle of "comic lead," if such a description can apply to any Chinese artiste. As a matter of fact

they are so serious, even in their fun, that the Californian romancer, Bret Harte, has told us that he never saw a genuine Chinaman laugh, and has even confessed that he is unable to say whether one of the national pieces he witnessed was a tragedy or a farce.

In short, Seng Vou was a comedian. The season had ended, crowned with success—perhaps out of proportion to the gold pieces he had amassed—he wished to return to his country otherwise than as a corpse, for Chinamen always like to get buried at home, and there are special steamers who carry dead Celestials and nothing else. At all risks, therefore, he had secretly slipped on board the *Dream.*

Loaded with provisions, did he hope to get through, incognito, a passage of several weeks, and then to land on the coast of China without being seen? It is just possible. At any rate, the case was hardly one for a death penalty.

So Godfrey had good reason to interfere in favor of the intruder, and Captain Turcott, who pretended to be angrier than he really was, gave up the idea of sending Seng Vou overboard to battle with the waves of the Pacific.

Seng Vou, however, did not return to his hiding-place in the hold, though he was rather an incubus on board. Phlegmatic, methodic, and by no means communicative, he carefully avoided the seamen, who had always some prank to play off on him, and he kept to his own provisions. He was thin enough in all conscience, and his additional weight but imperceptibly added to the cost of navigating the *Dream.* If Seng Vou got a free passage it was obvious that his carriage did not cost William W. Kolderup very much. His presence on board put into Captain Turcott's head an idea which his mate probably was the only one to understand thoroughly.

"He will bother us a bit—this confounded Chinee!—after all, so much the worse for him."

"Whatever made him stow himself away on board the *Dream?*" answered the mate.

"To get to Shanghai!" replied Captain Turcott. "Bless John and all John's sons too!"

CHAPTER VI

A PECULIAR DISASTER

DURING the following days, the 13th, 14th, and 15th of June, the barometer slowly fell, without an attempt to rise in the slightest degree, and the weather became variable, hovering between rain and wind or storm. The breeze strengthened considerably, and changed to south-westerly. It was a head-wind for the *Dream,* and the waves had now increased enormously, and lifted her forward. The sails were all furled, and she had to depend on her screw alone; under half steam, however, so as to avoid excessive laboring.

Godfrey bore the trial of the ship's motion without even losing his good-humor for a moment. Evidently he was fond of the sea. But Tartlet was not fond of the sea, and it served him out. It was pitiful to see the unfortunate professor of deportment deporting himself no longer, the professor of dancing dancing contrary to every rule of his art. Remain in his cabin, with the seas shaking the ship from stem to stern, he could not.

"Air! air!" he gasped. And so he never left the deck. A roll sent him rolling from one side to the other, a pitch sent him pitching from one end to the other. He clung to the rails, he clutched the ropes, he assumed every attitude that is absolutely condemned by the principles of the modern choregraphic art.

Ah! why could he not raise himself into the air by some balloon-like movement, and escape the eccentricities of that moving plane? A dancer of his ancestors had said that he only consented to set foot to the ground so as not to humiliate his companions, but Tartlet would willingly never have come down at all on the deck, whose perpetual agitation threatened to hurl him into the abyss. What an idea it was for the rich William W. Kolderup to send him here.

"Is this bad weather likely to last?" asked he of Captain Turcott twenty times a day.

"Dunno! barometer is not very promising!" was the invariable answer of the captain, knitting his brows.

"Shall we soon get there?"

"Soon, Mr. Tartlet? Hum! soon!"

"And they call this the Pacific Ocean!" repeated the unfortunate man, between a couple of shocks and oscillations.

It should be stated that, not only did Professor Tartlet suffer from sea-sickness, but also that fear had seized him as he watched the great seething waves breaking into foam level with the bulwarks of the *Dream,* and heard the valves, lifted by the violent beats, letting the steam off through the waste-pipes, as he felt the steamer tossing like a cork on the mountains of water.

"No," said he with a lifeless look at his pupil, "it is not impossible for us to capsize."

"Take it quietly, Tartlet," replied Godfrey. "A ship was made to float! There are reasons for all this."

"I tell you there are none." And, thinking thus, the professor had put on his life-belt. He wore it night and day, tightly buckled around his waist. He would not have taken it off for untold gold. Every time the sea gave him a moment's respite he would replenish it with another puff. In fact, he never blew it out enough to please him.

The weather became worse and worse, and threatened the *Dream* with a gale, which, had she been near the shore, would have been announced to her by the semaphores. During the day the ship was dreadfully knocked about, though running at half steam so as not to damage her engines. Her screw was continually immerging and emerging in the violent oscillations of her liquid bed. Hence, powerful strokes from its wings in the deeper water, or fearful tremors as it rose and ran wild, causing heavy thunderings beneath the stern, and furious gallopings of the pistons which the engineer could master but with difficulty.

One observation Godfrey made, of which at first he could not discover the cause. This was, that during the night the shocks experienced by the steamer were infinitely less violent than during the day. Was he then to conclude that the wind then fell, and that a calm set in after sundown?

This was so remarkable that, on the night between the 21st and 22nd of June, he endeavored to find out some explanation of it. The day had been particularly stormy,

the wind had freshened, and it did not appear at all likely that the sea would fall at night, lashed so capriciously as it had been for so many hours.

Toward midnight then Godfrey dressed, and, wrapping himself up warmly, went on deck. The men on watch were forward, Captain Turcott was on the bridge. The force of the wind had certainly not diminished. The shock of the waves, which should have dashed on the bows of the *Dream,* was, however very much less violent. But in raising his eyes toward the top of the funnel, with its black canopy of smoke, Godfrey saw that the smoke, instead of floating from the bow aft, was on the contrary, floating from aft forward, and following the same direction as the ship.

"Has the wind changed?" he said to himself.

And extremely glad at the circumstance he mounted the bridge. Stepping up to Turcott, "Captain!" he said.

The latter, enveloped in his oilskins, had not heard him approach, and at first could not conceal a movement of annoyance in seeing him close to him. "You, Mr. Godfrey, you—on the bridge?"

"Yes, I, Captain. I came to ask—"

"What?" answered Captain Turcott sharply.

"If the wind has not changed?"

"No, Mr. Godfrey, no. And, unfortunately, I think it will turn to a storm!"

"But we now have the wind behind us!"

"Wind behind us—yes—wind behind us!" replied the captain, visibly disconcerted at the observation. "But it is not my fault."

"What do you mean?"

"I mean that in order not to endanger the vessel's safety I have had to put her about and run before the storm."

"That will cause a most lamentable delay!" said Godfrey.

"Very much so," answered Captain Turcott, "but when day breaks, if the sea falls a little, I shall resume our westerly route. I should recommend you, Mr. Godfrey, to get back to your cabin. Take my advice, try and sleep while we are running before the wind. You will be less knocked about."

Godfrey made a sign of affirmation; turning a last anx-

ious glance at the low clouds which were chasing each other with extreme swiftness, he left the bridge, returned to his cabin, and soon resumed his interrupted slumbers. The next morning, the 22nd of June, as Captain Turcott had said, the wind having sensibly abated, the *Dream* was headed in the proper direction.

This navigation toward the west during the day, toward the east during the night, lasted for forty-eight hours more; but the barometer showed some tendency to rise, its oscillations became less frequent; it was to be presumed that the bad weather would end in northerly winds. And so in fact it happened.

On the 25th of June, about eight o'clock in the morning, when Godfrey stepped on deck, a charming breeze from the north-east had swept away the clouds, the sun's rays were shining through the rigging and tipping its projecting points with touches of fire. The sea, deep green in color, glittered along a large section of its surface beneath the direct influence of its beams. The wind blew only in feeble gusts which laced the wave-crests with delicate foam. The lower sails were set.

Properly speaking, they were not regular waves on which the sea rose and fell, but only lengthened undulations which gently rocked the steamer.

Undulations or waves, it is true, it was all one to Professor Tartlet, as unwell when it was "too mild," as when it was "too rough." There he was, half crouching on the deck, with his mouth open like a carp fainted out of water.

The mate on the poop, his telescope at his eye, was looking toward the north-east.

Godfrey approached him.

"Well, sir," said he gaily, "today is a little better than yesterday."

"Yes, Mr. Godfrey," replied the mate, "we are now in smooth water."

"And the *Dream* is on the right road!"

"Not yet."

"Not yet? and why?"

"Because we have evidently drifted north-eastward during this last spell, and we must find out our position exactly."

"But there is a good sun and a horizon perfectly clear."

"At noon in taking its height we shall get a good observation, and then the captain will give us our course."

"Where is the captain?" asked Godfrey.

"He has gone off."

"Gone off?"

"Yes! our look-outs saw from the whiteness of the sea that there were some breakers away to the east; breakers which were not shown on the chart. So the steam launch was got out, and with the boatswain and three men, Captain Turcott has gone off to explore."

"How long ago?"

"About an hour and a half!"

"Ah!" said Godfrey, "I am sorry he did not tell me. I should like to have gone too."

"You were asleep, Mr. Godfrey," replied the mate, "and the captain did not like to wake you."

"I am sorry; but tell me, which way did the launch go?"

"Over there," answered the mate, "over the starboard bow, north-eastward."

"And can you see it with the telescope?"

"No, she is too far off."

"But will she be long before she comes back?"

"She won't be long, for the captain is going to take the sights himself, and to do that he must be back before noon."

At this Godfrey went and sat on the forecastle, having sent some one for his glasses. He was anxious to watch the return of the launch. Captain Turcott's reconnaissance did not cause him any surprise. It was natural that the *Dream* should not be run into danger on a part of the sea where breakers had been reported.

Two hours passed. It was not until half-past ten that a light line of smoke began to rise on the horizon.

It was evidently the steam launch which, having finished the reconnaissance, was making for the ship.

It amused Godfrey to follow her in the field of his glasses. He saw her little by little reveal herself in clearer outline, he saw her grow on the surface of the sea, and then give definite shape to her smoke wreath, as it min-

gled with a few curls of steam on the clear depth of the horizon.

She was an excellent little vessel, of immense speed, and as she came along at full steam, she was soon visible to the naked eye. Toward eleven o'clock, the wash from her bow as she tore through the waves was perfectly distinct, and behind her the long furrow of foam gradually growing wider and fainter like the tail of a comet.

At a quarter-past eleven, Captain Turcott hailed and boarded the *Dream*.

"Well, captain, what news?" asked Godfrey, shaking his hand.

"Ah! Good morning, Mr. Godfrey!"

"And the breakers?"

"Only show!" answered Captain Turcott. "We saw nothing suspicious, our men must have been deceived, but I am rather surprised at that, all the same."

"We are going ahead then?" said Godfrey.

"Yes, we are going on now, but I must first take an observation."

"Shall we get the launch on board?" asked the mate.

"No," answered the captain, "we may want it again. Leave it in tow!"

The captain's orders were executed, and the launch, still under steam, dropped around to the stern of the *Dream*.

Three-quarters of an hour afterward, Captain Turcott, with his sextant in his hand, took the sun's altitude, and having made his observation, he gave the course. That done, having given a last look at the horizon, he called the mate, and taking him into his cabin, the two remained there in a long consultation.

The day was a very fine one. The sails had been furled, and the *Dream* steamed rapidly without their help. The wind was very slight, and with the speed given by the screw there would not have been enough to fill them.

Godfrey was thoroughly happy. This sailing over a beautiful sea, under a beautiful sky, could anything be more cheering, could anything give more impulse to thought, more satisfaction to the mind? And it is scarcely to be wondered at that Professor Tartlet also began to recover himself a little. The state of the sea did not

inspire him with immediate inquietude, and his physical being showed a little reaction. He tried to eat, but without taste or appetite. Godfrey would have had him take off the life-belt which encircled his waist, but this he absolutely refused to do. Was there not a chance of this conglomeration of wood and iron, which men call a vessel, gaping asunder at any moment?

The evening came, a thick mist spread over the sky, without descending to the level of the sea. The night was to be much darker than would have been thought from the magnificent daytime.

There was no rock to fear in these parts, for Captain Turcott had just fixed his exact position on the charts; but collisions are always possible, and they were much more frequent on foggy nights.

The lamps were carefully put into place as soon as the sun set. The white one was run up the mast, and the green light to the right and the red one to the left gleamed in the shrouds. If the *Dream* was run down, at least it would not be her fault—that was one consolation. To founder when one is in order, is to founder nevertheless. But if any one on board made this observation it was of course Professor Tartlet. However, the worthy man, always on the roll and the pitch, had regained his cabin, Godfrey his; the one with the assurance, the other in the hope that he would pass a good night, for the *Dream* scarcely moved on the crest of the lengthened waves.

Captain Turcott, having handed over the watch to the mate, also came under the poop to take a few hours' rest. All was in order. The steamer could go ahead in perfect safety, although it did not seem as though the thick fog would lift.

In about twenty minutes Godfrey was asleep, and the sleepless Tartlet, who had gone to bed with his clothes on as usual, only betrayed himself by distant sighs. All at once—at about one in the morning—Godfrey was awakened by a dreadful clamor.

He jumped out of bed, slipped on his clothes, his trousers, his waistcoat and his sea-boots. Almost immediately a fearful cry was heard on deck, "We are sinking! we are sinking!"

In an instant Godfrey was out of his cabin and in the saloon. There he cannoned against an inert mass which he did not recognize. It was Professor Tartlet.

The whole crew were on deck, hurrying about at the orders of the mate and captain.

"A collision?" asked Godfrey.

"I don't know, I don't know—this beastly fog—" answered the mate; "but we are sinking!"

"Sinking?" exclaimed Godfrey.

And in fact the *Dream,* which had doubtless struck on a rock, was sensibly foundering. The water was creeping up to the level of the deck. The engine fires were probably already out below.

"To the sea! to the sea, Mr. Morgan!" exclaimed the captain. "There is not a moment to lose! You can see the ship settling down! It will draw you down in the eddy!"

"And Tartlet?"

"I'll look after him!—We are only half a cable from the shore!"

"But you?"

"My duty compels me to remain here to the last, and I remain!" said the captain. "But get off! get off!"

Godfrey still hesitated to cast himself into the waves, but the water was already up to the level of the deck.

Captain Turcott knowing that Godfrey swam like a fish, seized him by the shoulders, and did him the service of throwing him overboard.

It was time! Had it not been for the darkness, there would doubtless have been seen a deep raging vortex in the place once occupied by the *Dream.*

But Godfrey, in a few strokes in the calm water, was able to get swiftly clear of the whirlpool, which would have dragged him down like the maelstrom.

All this was the work of a minute.

A few minutes afterward, amid shouts of despair, the lights on board went out one after the other.

Doubt existed no more; the *Dream* had sunk head downward!

As for Godfrey he had been able to reach a large, lofty rock away from the surf. There, shouting vainly in the darkness, hearing no voice in reply to his own, not know-

ing if he should find himself on an isolated rock or at the extremity of a line of reefs, and perhaps the sole survivor of the catastrophe, he waited for the dawn.

CHAPTER VII
ON LAND AGAIN

THREE long hours had still to pass before the sun reappeared above the horizon. These were such hours that they might rather be called centuries.

The trial was a rough one to begin with, but, we repeat, Godfrey had not come out for a simple promenade. He himself put it very well when he said he had left behind him quite a lifetime of happiness and repose, which he would never find again in his search for adventures. He tried his utmost therefore to rise to the situation.

He was, temporarily, under shelter. The sea after all could not drive him off the rock which lay anchored alone amid the spray of the surf. Was there any fear of the incoming tide soon reaching him? No, for on reflection he concluded that the wreck had taken place at the highest tide of the new moon.

But was the rock isolated? Did it command a line of breakers scattered on this portion of the sea? What was this coast which Captain Turcott had thought he saw in the darkness? To which continent did it belong? It was only too certain that the *Dream* had been driven out of her route during the storm of the preceding days. The position of the ship could not have been exactly fixed. How could there be a doubt of this when the captain had two hours before affirmed that his charts bore no indications of breakers in these parts! He had even done better and had gone himself to reconnoiter these imaginary reefs which his look-outs reported they had seen in the east. It nevertheless had been only too true, and Captain Turcott's reconnaissance would have certainly prevented the catastrophe if it had only been pushed far enough. But what was the good of returning to the past?

The important question in face of what had happened—a question of life or death—was for Godfrey to know if he was near to some land. In what part of the Pacific

there would be time later on to determine. Before everything he must think as soon as the day came of how to leave the rock, which in its biggest part could not measure more than twenty yards square. But people do not leave one place except to go to another. And if this other did not exist, if the captain had been deceived in the fog, if around the breakers there stretched a boundless sea, if at the extreme point of view the sky and the water seemed to meet all around the horizon?

The thoughts of the man were thus concentrated on this point. All his powers of vision did he employ to discover through the black night if any confused mass, any heap of rocks or cliffs, would reveal the neighborhood of land to the eastward of the reef.

Godfrey saw nothing. Not a smell of earth reached his nose, not a sensation of light reached his eyes, not a sound reached his ears. Not a bird traversed the darkness. It seemed that around him there was nothing but a vast desert of water.

Godfrey did not hide from himself that the chances were a thousand to one that he was lost. He no longer thought of making the tour of the world, but of facing death, and calmly and bravely his thoughts rose to that Providence which can do all things for the feeblest of its creatures, though the creatures can do nothing of themselves. And so Godfrey had to wait for the day to resign himself to his fate, if safety was impossible; and, on the contrary, to try everything, if there was any chance of life.

Calmed by the very gravity of his reflections, Godfrey had seated himself on the rock. He had stripped off some of his clothes which had been saturated by the sea-water, his woolen waistcoat and his heavy boots, so as to be ready to jump into the sea if necessary.

However, was it possible that no one had survived the wreck? What! not one of the men of the *Dream* carried to shore? Had they all been sucked in by the terrible whirlpool which the ship had drawn around herself as she sank? The last to whom Godfrey had spoken was Captain Turcott, resolved not to quit his ship while one of his sailors was still there! It was the captain himself

who had hurled him into the sea at the moment the *Dream* was disappearing.

But the others, the unfortunate Tartlet, and the unhappy Chinese, surprised without doubt, and swallowed up, the one in the poop, the other in the depths of the hold, what had become of them? Of all those on board the *Dream,* was he the only one saved? And had the steam launch remained at the stern of the steamer? Could not a few passengers or sailors have saved themselves therein, and found time to flee from the wreck? But was it not rather to be feared that the launch had been dragged down by the ship under several fathoms of water?

Godfrey then said to himself, that if in this dark night he could not see, he could at least make himself heard. There was nothing to prevent his shouting and hailing in the deep silence. Perhaps the voice of one of his companions would respond to his.

Over and over again then did he call, giving forth a prolonged shout which should have been heard for a considerable distance around. Not a cry answered to his.

He began again, many times, turning successively to every point of the horizon.

Absolute silence.

"Alone! alone!" he murmured.

Not only had no cry answered to him, but no echo had sent him back the sound of his own voice. Had he been near a cliff, not far from the group of rocks, such as generally border the shore, it is certain that his shouts, repelled by the obstacles, would have returned to him. Either eastward of the reef, therefore, stretched a low-lying shore ill-adapted for the production of an echo, or there was no land in his vicinity, the bed of breakers on which he had found refuge was isolated.

Three hours were passed in these anxieties. Godfrey, quite chilled, walked about the top of the rock, trying to battle with the cold. At last a few pale beams of light tinged the clouds in the zenith. It was the reflection of the first coloring of the horizon.

Godfrey turned to the west—the only side toward which there could be land—to see if any cliff outlined itself in the shadow. With its early rays the rising sun might disclose its features more distinctly.

But nothing appeared through the misty dawn. A light fog was rising over the sea, which did not even admit of his discovering the extent of the breakers.

He had, therefore, to satisfy himself with illusions. If Godfrey were really cast on an isolated rock in the Pacific, it was death to him after a brief delay, death by hunger, by thirst, or if necessary, death at the bottom of the sea as a last resource!

However, he kept constantly looking, and it seemed as though the intensity of his gaze increased enormously, for all his will was concentrated therein.

At length the morning mist began to fade away. Godfrey saw the rocks which formed the reef successively defined in relief on the sea, like a troop of marine monsters. It was a long and irregular assemblage of dark boulders, strangely worn, of all sizes and forms, whose direction was almost west and east. The enormous block on the top of which Godfrey found himself emerged from the sea on the western edge of the bank scarcely thirty fathoms from the spot where the *Dream* had gone down. The sea hereabout appeared to be very deep, for of the steamer nothing was to be seen, not even the ends of her masts. Perhaps by some under-current she had been drawn away from the reefs.

A glance was enough for Godfrey to take in this state of affairs. There was no safety on that side. All his attention was directed toward the other side of the breakers, which the lifting fog was gradually disclosing. The sea, now that the tide had retired, allowed the rocks to stand out very distinctly. They could be seen to lengthen as their humid bases widened. Here were vast intervals of water, there a few shallow pools. If they joined on to any coast, it would not be difficult to reach it.

Up to the present, however, there was no sign of any shore. Nothing yet indicated the proximity of dry land, even in this direction. The fog continued to lift, and the field of view persistently watched by Godfrey continued to grow. Its wreaths had now rolled off for about half a mile or so. Already a few sandy flats appeared among the rocks, carpeted with their slimy sea-weed.

Did not this sand indicate more or less the presence of a beach, and if the beach existed, could there be a doubt

but what it belonged to the coast of a more important land? At length a long profile of low hills, buttressed with huge granitic rocks, became clearly outlined and seemed to shut in the horizon on the west. The sun had drunk up all the morning vapors, and his disk broke forth in all its glory.

"Land! land!" exclaimed Godfrey.

And he stretched his hands toward the shore-line, as he kneeled on the reef and offered his thanks to Heaven.

It was really land. The breakers only formed a projecting ridge, something like the southern cape of a bay, which curved around for about two miles or more. The bottom of the curve seemed to be a level beach, bordered by trifling hills, contoured here and there with lines of vegetation, but of no great size.

From the place which Godfrey occupied, his view was able to grasp the whole of this side.

Bordered north and south by two unequal promontories, it stretched away for, at the most, five or six miles. It was possible, however, that it formed part of a large district. Whatever it was, it offered at the least temporary safety. Godfrey, at the sight, could not conceive a doubt but that he had not been thrown on to a solitary reef, and that this morsel of ground would satisfy his earliest wants.

"To land! to land!" he said to himself.

But before he left the reef, he gave a look around for the last time. His eyes again interrogated the sea away up to the horizon. Would some raft appear on the surface of the waves, some fragment of the *Dream,* some survivor, perhaps?

Nothing. The launch even was not there, and had probably been dragged into the common abyss.

Then the idea occurred to Godfrey that among the breakers some of his companions might have found a refuge, and were, like him, waiting for the day to try and reach the shore.

There was nobody, neither on the rocks, nor on the beach! The reef was as deserted as the ocean!

But in default of survivors, had not the sea thrown up some of the corpses? Could not Godfrey find among the rocks, along to the utmost boundary of the surf, the inanimate bodies of some of his companions?

No! Nothing along the whole length of the breakers, which the last ripples of the ebb had now left bare.

Godfrey was alone! He could only count on himself to battle with the dangers of every sort which environed him!

Before this reality, however, Godfrey, let it be said to his credit, did not quail. But as before everything it was best for him to ascertain the nature of the ground from which he was separated by so short a distance, he left the summit of the rock and began to approach the shore.

When the interval which separated the rocks was too great to be cleared at a bound, he got down into the water, and sometimes walking and sometimes swimming, he easily gained the one next in order. When there was but a yard or two between, he jumped from one rock to the other. His progress over these slimy stones, carpeted with glistening sea-weeds, was not easy, and it was long. Nearly a quarter of a mile had thus to be traversed.

But Godfrey was active and handy, and at length he set foot on the land where there probably awaited him, if not early death, at least a miserable life worse than death. Hunger, thirst, cold, and nakedness, and perils of all kinds; without a weapon of defense, without a gun to shoot with, without a change of clothes—such the extremities to which he was reduced.

How imprudent he had been! He had been desirous of knowing if he was capable of making his way in the world under difficult circumstances! He had put himself to the proof! He had envied the lot of a Crusoe! Well, he would see if the lot were an enviable one!

And then there returned to his mind the thought of his happy existence, that easy life in San Francisco, in the midst of a rich and loving family, which he had abandoned to throw himself into adventures. He thought of his Uncle Will, of his betrothed Phina, of his friends who would doubtless never see him again.

As he called up these remembrances his heart swelled, and in spite of his resolution tears rose to his eyes.

And again, if he was not alone, if some other survivor of the shipwreck had managed, like him, to reach the shore, and even in default of the captain or the mate, this proved to be Professor Tartlet, how little he could depend

on that frivolous being, and how slightly improved the chances of the future appeared! At this point, however, he still had hope. If he had found no trace among the breakers, would he meet with any on the beach?

Godfrey took another long look from north to south. He did not notice a single human being. Evidently this portion of the earth was uninhabited. In any case there was no sign, not a trace of smoke in the air.

"Let us get on!" said Godfrey to himself.

And he walked along the beach toward the north, before venturing to climb the sand dunes, which would allow him to reconnoiter the country over a larger extent.

The silence was absolute. The sand had received no other footmark. A few sea-birds, gulls or guillemots, were skimming along the edge of the rocks, the only living things in the solitude.

Godfrey continued his walk for a quarter of an hour. At last he was about to turn on to the talus of the most elevated of the dunes, dotted with rushes and brushwood, when he suddenly stopped.

A shapeless object, extraordinarily distended, something like the corpse of a sea monster, thrown there, doubtless, by the late storm, was lying about thirty paces off on the edge of the reef. Godfrey hastened toward it.

The nearer he approached the more rapidly did his heart beat. In truth, in this stranded animal he seemed to recognize a human form.

Godfrey was not ten paces away from it, when he stopped as if rooted to the soil, and exclaimed, "Tartlet!"

It was the professor of dancing and deportment. Godfrey rushed toward his companion, who perhaps still breathed.

A moment afterward he saw that it was the life-belt which produced this extraordinary distension, and gave the aspect of a monster of the sea to the unfortunate professor. But although Tartlet was motionless, was he dead? Perhaps this natatory clothing had kept him above water while the surf had borne him to shore?

Godfrey set to work. He kneeled down by Tartlet; he unloosed the life-belt and rubbed him vigorously. He noticed at last a light breath on the half-opened lips! He put his hand on his heart! The heart still beat.

Godfrey spoke to him. Tartlet shook his head, then he gave utterance to a hoarse exclamation, followed by incoherent words. Godfrey shook him violently. Tartlet then opened his eyes, passed his left hand over his brow, lifted his right hand and assured himself that his precious kit and bow, which he tightly held, had not abandoned him.

"Tartlet! My dear Tartlet!" shouted Godfrey, lightly raising his head.

The head with its mass of tumbled hair gave an affirmative nod.

"It is I! I! Godfrey!"

"Godfrey?" asked the professor. And then he turned over, and rose to his knees, and looked about, and smiled, and rose to his feet! He had discovered that at last he was on a solid base! He had gathered that he was no longer on the ship's deck, exposed to all the uncertainties of its pitches and its rolls! The sea had ceased to carry him! He stood on firm ground!

And then Professor Tartlet recovered the aplomb which he had lost since his departure; his feet placed themselves naturally, with their toes turned out, in the regulation position; his left hand seized his kit, his right hand grasped his bow.

Then, while the strings, vigorously attacked, gave forth a humid sound of melancholy sonorousness, these words escaped his smiling lips, "In place, miss!"

The good man was thinking of Phina.

CHAPTER VIII

THE OTHER REFUGEES

THAT done, the professor and his pupil rushed into one another's arms. "My dear Godfrey!" exclaimed Tartlet.

"My good Tartlet!" replied Godfrey.

"At last we are arrived in port!" observed the professor in the tone of a man who has had enough of navigation and its accidents.

He called it arriving in port!

Godfrey had no desire to contradict him. "Take off

your life-belt," he said. "It suffocates you and hampers your movements."

"Do you think I can do so without inconvenience?" asked Tartlet.

"Without any inconvenience," answered Godfrey. "Now put up your fiddle, and let us take a look around."

"Come on," replied the professor; "but if you don't mind, Godfrey, let us go to the first restaurant we see. I am dying of hunger, and a dozen sandwiches washed down with a glass or two of wine will soon set me on my legs again."

"Yes! to the first restaurant!" answered Godfrey, nodding his head; "and even to the last, if the first does not suit us."

"And," continued Tartlet, "we can ask some fellow as we go along the road to the telegraph office so as to send a message off to your Uncle Kolderup. That excellent man will hardly refuse to send on some necessary cash for us to get back to Montgomery Street, for I have not got a cent with me!"

"Agreed, to the first telegraph office," answered Godfrey, "or if there isn't one in this country, to the first post office. Come on, Tartlet."

The professor took off his swimming apparatus, and passed it over his shoulder like a hunting-horn, and then both stepped out for the edge of the dunes which bordered the shore.

What more particularly interested Godfrey, whom the encounter with Tartlet had imbued with some hope, was to see if they two were the only survivors of the *Dream*.

A quarter of an hour after the explorers had left the edge of the reef they had climbed a dune about sixty or eighty feet high, and stood on its crest. Thence they looked on a large extent of coast, and examined the horizon in the east, which till then had been hidden by the hills on the shore.

Two or three miles away in that direction a second line of hills formed the background, and beyond them nothing was seen of the horizon.

Toward the north the coast trended off to a point, but it could not be seen if there was a corresponding cape behind. On the south a creek ran some distance into the

shore, and on this side it looked as though the ocean closed the view. Whence this land in the Pacific was probably a peninsula, and the isthmus which joined it to the continent would have to be sought for toward the north or northeast.

The country, however, far from being barren, was hidden beneath an agreeable mantle of verdure; long prairies, amid which meandered many limpid streams, and high and thick forests, whose trees rose above one another to the very background of hills. It was a charming landscape.

But of houses forming town, village, or hamlet, not one was in sight! Of buildings grouped and arranged as a farm of any sort, not a sign! Of smoke in the sky, betraying some dwelling hidden among the trees, not a trace. Not a steeple above the branches, not a windmill on an isolated hill. Not even in default of houses a cabin, a hut, an ajoupa, or a wigwam? No! nothing. If human beings inhabited this unknown land, they must live like troglodytes, below, and not above the ground. Not a road was visible, not a footpath, not even a track. It seemed that the foot of man had never trod either a rock of the beach or a blade of the grass on the prairies.

"I don't see the town," remarked Tartlet, who, however, remained on tiptoe.

"That is perhaps because it is not in this part of the province!" answered Godfrey.

"But a village?"

"There's nothing here."

"Where are we then?"

"I know nothing about it."

"What! You don't know! But, Godfrey, we had better make haste and find out."

"Who is to tell us?"

"What will become of us then?" exclaimed Tartlet, rounding his arms and lifting them to the sky.

"Become a couple of Crusoes!"

At this answer the professor gave a bound such as no clown had ever equaled.

Crusoes! They! A Crusoe! He! Descendants of that Selkirk who had lived for long years on the island of Juan Fernandez! Imitators of the imaginary heroes of Daniel Defoe and De Wyss whose adventures they had so

often read! Abandoned, far from their relatives, their friends; separated from their fellow-men by thousands of miles, destined to defend their lives perhaps against wild beasts, perhaps against savages who would land there, wretches without resources, suffering from hunger, suffering from thirst, without weapons, without tools, almost without clothes, left to themselves. No, it was impossible!

"Don't say such things, Godfrey," exclaimed Tartlet. "No! Don't joke about such things! The mere supposition will kill me! You are laughing at me, are you not?"

"Yes, my gallant Tartlet," answered Godfrey. "Reassure yourself. But in the first place, let us think about matters that are pressing."

In fact, they had to try and find some cavern, a grotto or hole, in which to pass the night, and then to collect some edible mollusks so as to satisfy the cravings of their stomachs. Godfrey and Tartlet then commenced to descend the talus of the dunes in the direction of the reef. Godfrey showed himself very ardent in his researches, and Tartlet considerably stupefied by his shipwreck experiences. The first looked before him, behind him, and all around him; the second hardly saw ten paces in front of him.

"If there are no inhabitants on this land, are there any animals?" asked Godfrey.

He meant to say domestic animals, such as furred and feathered game, not wild animals which abound in tropical regions, and with which they were not likely to have to do.

Several flocks of birds were visible on the shore, bitterns, curlews, bernicle geese, and teal, which hovered and chirped and filled the air with their flutterings and cries, doubtless protesting against the invasion of their domain.

Godfrey was justified in concluding that where there were birds there were nests, and where there were nests there were eggs. The birds congregated here in such numbers, because rocks provided them with thousands of cavities for their dwelling-places. In the distance a few herons and some flocks of snipe indicated the neighborhood of a marsh.

Birds then were not wanting, the only difficulty was to get at them without fire-arms. The best thing to do now was to make use of them in the egg state, and consume them under that elementary but nourishing form.

But if the dinner was there, how were they to cook it? How were they to set about lighting a fire? An important question, the solution of which was postponed.

Godfrey and Tartlet returned straight toward the reef, over which some sea-birds were circling. An agreeable surprise there awaited them.

Among the indigenous fowl which ran along the sand of the beach and pecked about among the sea-weed and under the tufts of aquatic plants, was it a dozen hens and two or three cocks of the American breed that they beheld? No! There was no mistake, for at their approach did not a resounding cock-a-doodle-do-oo-oo rend the air like the sound of a trumpet?

And farther off, what were those quadrupeds which were gliding in and out of the rocks, and making their way toward the first slopes of the hills, or grubbing beneath some of the green shrubs? Godfrey could not be mistaken. There were a dozen agouties, five or six sheep, and as many goats, who were quietly browsing on the first vegetation on the very edge of the prairie.

"Look there, Tartlet!" he exclaimed.

And the professor looked, but saw nothing, so much was he absorbed with the thought of this unexpected situation.

A thought flashed across the mind of Godfrey, and it was correct: it was that these hens, agouties, goats, and sheep had belonged to the *Dream*. At the moment she went down, the fowls had easily been able to reach the reef and then the beach. As for the quadrupeds, they could easily have swum ashore.

"And so," remarked Godfrey, "what none of our unfortunate companions have been able to do, these simple animals, guided by their instinct, have done! And of all those on board the *Dream*, none have been saved but a few beasts!"

"Including ourselves!" answered Tartlet naively.

As far as he was concerned, he had come ashore unconsciously, very much like one of the animals. It mattered little. It was a very fortunate thing for the two shipwrecked men that a certain number of these animals had reached the shore. They would collect them, fold them, and with the special fecundity of their species, if their stay

on this land was a lengthy one, it would be easy to have quite a flock of quadrupeds, and a yard full of poultry.

But on this occasion, Godfrey wished to keep to such alimentary resources as the coast could furnish, either in eggs or shell-fish. Professor Tartlet and he set to work to forage among the interstices of the stones, and beneath the carpet of sea-weeds, and not without success. They soon collected quite a notable quantity of mussels and periwinkles, which they could eat raw. A few dozen eggs of the bernicle geese were also found among the higher rocks which shut in the bay on the north. They had enough to satisfy a good many; and, hunger pressing, Godfrey and Tartlet hardly thought of making difficulties about their first repast.

"And the fire?" said the professor.

"Yes! The fire!" said Godfrey.

It was the most serious of questions, and it led to an inventory being made of the contents of their pockets. Those of the professor were empty or nearly so. They contained a few spare strings for his kit, and a piece of rosin for his bow. How would you get a light from that, I should like to know? Godfrey was hardly better provided. However, it was with extreme satisfaction that he discovered in his pocket an excellent knife, whose leather case had kept it from the sea-water. This knife, with blade, gimlet, hook, and saw, was a valuable instrument under the circumstances. But besides this tool, Godfrey and his companion had only their two hands; and as the hands of the professor had never been used except in playing his fiddle, and making his gestures, Godfrey concluded that he would have to trust to his own.

He thought, however, of utilizing those of Tartlet for procuring a fire by means of rubbing two sticks of wood rapidly together. A few eggs cooked in the embers would be greatly appreciated at their second meal at noon.

While Godfrey then was occupied in robbing the nests in spite of the proprietors, who tried to defend their progeny in the shell, the professor went off to collect some pieces of wood which had been dried by the sun at the foot of the dunes. These were taken behind a rock sheltered from the wind from the sea. Tartlet then chose two very dry pieces, with the intention of gradually obtaining

sufficient heat by rubbing them vigorously and continuously together. What simple Polynesian savages commonly did, why should not the professor, so much their superior in his own opinion, be able to do?

Behold him then, rubbing and rubbing, in a way to dislocate the muscles of his arm and shoulder. He worked himself into quite a rage, poor man! But whether it was that the wood was not right, or its dryness was not sufficient, or the professor held it wrongly, or had not got the peculiar turn of hand necessary for operations of this kind, if he did not get much heat out of the wood, he succeeded in getting a good deal out of himself. In short, it was his own forehead alone which smoked under the vapors of his own perspiration.

When Godfrey returned with his collection of eggs, he found Tartlet in a rage, in a state to which his choregraphic exercises had never provoked him.

"Doesn't it do?" he asked.

"No, Godfrey, it does not do," replied the professor. "And I begin to think that these inventions of the savages are only imaginations to deceive the world."

"No," answered Godfrey. "But in that, as in all things, you must know how to do it."

"These eggs, then?"

"There is another way. If you attach one of these eggs to the end of a string and whirl it round rapidly, and suddenly arrest the movement of rotation, the movement may perhaps transform itself into heat, and then—"

"And then the egg will be cooked?"

"Yes, if the rotation has been swift enough and the stoppage sudden enough. But how do you produce the stoppage without breaking the egg? Now, there is a simpler way, dear Tartlet. Behold!"

And carefully taking one of the eggs of the bernicle goose, he broke the shell at its end, and adroitly swallowed the inside without any further formalities.

Tartlet could not make up his mind to imitate him, and contented himself with the shell-fish.

It now remained to look for a grotto or some shelter in which to pass the night.

"It is an unheard-of thing," observed the professor,

"that Crusoes cannot at the least find a cavern, which, later on, they can make their home!"

"Let us look," said Godfrey.

It was unheard of. We must avow, however, that on this occasion the tradition was broken. In vain did they search along the rocky shore on the southern part of the bay. Not a cavern, not a grotto, not a hole was there that would serve as a shelter. They had to give up the idea. Godfrey resolved to reconnoiter up to the first trees in the background beyond the sandy coast.

Tartlet and he then remounted the first line of sand-hills and crossed the verdant prairies which they had seen a few hours before. A very odd circumstance, and a very fortunate one at the time, that the other survivors of the wreck voluntarily followed them. Evidently, cocks and hens, and sheep, goats and agouties, driven by instinct, had resolved to go with them. Doubtless they felt too lonely on the beach, which did not yield sufficient food.

Three-quarters of an hour later Godfrey and Tartlet —they had scarcely spoken during the exploration—arrived at the outskirts of the trees. Not a trace was there of habitation or inhabitant. Complete solitude. It might even be doubted if this part of the country had ever been trodden by human feet.

In this place were a few handsome trees, in isolated groups, and others more crowded about a quarter of a mile in the rear formed a veritable forest of different species.

Godfrey looked out for some old trunk, hollowed by age, which could offer a shelter among its branches, but his researches were in vain, although he continued them till night was falling.

Hunger made itself sharply felt, and the two contented themselves with mussels, of which they had thoughtfully brought an ample supply from the beach. Then, quite tired out, they lay down at the foot of a tree, and trusting to Providence, slept through the night.

CHAPTER IX
GODFREY EXPLORES

THE night passed without incident. The two men, quite knocked up with excitement and fatigue, had slept as peacefully as if they had been in the most comfortable room in the mansion in Montgomery Street.

On the morrow, the 27th of June, at the first rays of the rising sun, the crow of the cock awakened them.

Godfrey immediately recognized where he was, but Tartlet had to rub his eyes and stretch his arms for some time before he did so.

"Is breakfast this morning to resemble dinner yesterday?" was his first observation.

"I am afraid so," answered Godfrey. "But I hope we shall dine better this evening."

The professor could not restrain a significant grimace. Where were the tea and sandwiches which had hitherto been brought to him when he awoke? How could he wait till breakfast-time, the bell for which would perhaps never sound, without this preparatory repast?

But it was necessary to make a start. Godfrey felt the responsibility which rested on him, on him alone, for he could in no way depend on his companion. In that empty box which served the professor for a cranium there could be born no practical idea; Godfrey would have to think, contrive, and decide for both.

His first thought was for Phina, his betrothed, whom he had so stupidly refused to make his wife; his second for his Uncle Will, whom he had so imprudently left, and then turning to Tartlet, "To vary our ordinary," he said, "here are some shell-fish and half a dozen eggs."

"And nothing to cook them with!"

"Nothing!" said Godfrey. "But if the food itself was missing, what would you say then, Tartlet?"

"I should say that nothing was not enough," said Tartlet dryly.

Nevertheless, they had to be content with this repast.

The very natural idea occurred to Godfrey to push forward the reconnaissance commenced the previous evening. Above all it was necessary to know as soon as possible in

what part of the Pacific Ocean the *Dream* had been lost, so as to discover some inhabited place on the shore, where they could either arrange the way of returning home or await the passing of some ship.

Godfrey observed that if he could cross the second line of hills, whose picturesque outline was visible beyond the first, he might perhaps be able to do this. He reckoned that they could get there in an hour or two, and it was to this urgent exploration that he resolved to devote the first hours of the day. He looked around him. The cocks and hens were beginning to peck about among the high vegetation. Agouties, goats, sheep, went and came on the skirt of the forest.

Godfrey did not care to drag all this flock of poultry and quadrupeds about with him. But to keep them more safely in this place, it would be necessary to leave Tartlet in charge of them.

Tartlet agreed to remain alone, and for several hours to act as shepherd of the flock. He made but one observation. "If you lose yourself, Godfrey?"

"Have no fear of that," answered the young man, "I have only this forest to cross, and as you will not leave its edge I am certain to find you again."

"Don't forget the telegram to your Uncle Will, and ask him for a good many hundred dollars."

"The telegram—or the letter! It is all one!" answered Godfrey, who so long as he had not fixed on the position of this land was content to leave Tartlet to his illusions.

Then having shaken hands with the professor, he plunged beneath the trees, whose thick branches scarcely allowed the sun's rays to penetrate. It was their direction, however, which was to guide our young explorer toward the high hill whose curtain hid from his view the whole of the eastern horizon.

Footpath there was none. The ground, however, was not free from all imprint. Godfrey in certain places remarked the tracks of animals. On two or three occasions he even believed he saw some rapid ruminants moving off, either elans, deer, or wapiti, but he recognized no trace of ferocious animals such as tigers or jaguars, whose absence however, was no cause for regret.

The first floor of the forest, that is to say all that portion

of the trees, comprised between the first fork and the branches, afforded an asylum to a great number of birds—wild pigeons by the hundred beneath the trees, ospreys, grouse, aracaris with beaks like a lobster's claw, and higher, hovering above the glades, two or three of those lammergeiers whose eye resembles a cockade. But none of the birds were of such special kinds that he could therefrom make out the latitude of this continent. So it was with the trees of this forest. Almost the same species as those in that part of the United States which comprises Lower California, and New Mexico.

Generally, there was enough space between the trees to allow him to pass without being obliged to call on fire or the axe. The sea breeze circulated freely amid the higher branches, and here and there great patches of light shone on the ground.

And so Godfrey went along striking an oblique line beneath these large trees. To take any precautions never occurred to him. The desire to reach the heights which bordered the forest on the east entirely absorbed him. He sought among the foliage for the direction of the solar rays so as to march straight on his goal. He did not even see the guide-birds, so named because they fly before the steps of the traveler, stopping, returning, and darting on ahead as if they were showing the way. Nothing could distract him.

His state of mind was intelligible. Before an hour had elapsed his fate would be settled! Before an hour he would know if it were possible to reach some inhabited portion of the continent.

Already Godfrey, reasoning on what had been the route followed and the way made by the *Dream* during a navigation of seventeen days, had concluded that it could only be on the Japanese or Chinese coast that the ship had gone down.

Besides the position of the sun, always in the south, rendered it quite certain that the *Dream* had not crossed the line.

Two hours after he had started Godfrey reckoned the distance he had traveled at about five miles, considering several circuits which he had had to make owing to the

density of the forest. The second group of hills could not be far away.

Already the trees were getting farther from each other, forming isolated groups, and the rays of light penetrated more easily through the lofty branches. The ground began slightly to slope, and then abruptly to rise.

Although he was somewhat fatigued, Godfrey had enough will not to slacken his pace. He would doubtless have run had it not been for the steepness of the earlier ascents.

He soon got high enough to overlook the general mass of the verdant dome which stretched away behind him, and whence several heads of trees here and there emerged.

But Godfrey did not dream of looking back. His eyes never quitted the line of the denuded ridge, which showed itself about 400 or 500 feet before and above him. That was the barrier which all the time hid him from the eastern horizon.

A tiny cone, obliquely truncated, overlooked this rugged line and joined on with its gentle slope to the sinuous crest of the hills.

"There! there!" said Godfrey, "that is the point I must reach! The top of that cone! And from there what shall I see?—A town?—A village?—A desert?"

Highly excited, Godfrey mounted the hill, keeping his elbows at his chest to restrain the beating of his heart. His panting tired him, but he had not the patience to stop so as to recover himself. Were he to have fallen half fainting on the summit of the cone which shot up about 100 feet above his head, he would not have lost a minute in hastening toward it.

A few minutes more and he would be there. The ascent seemed to him steep enough on his side, an angle perhaps of thirty or thirty-five degrees. He helped himself up with hands and feet; he seized on the tufts of slender herbs on the hill-side, and on a few meager shrubs, mastics and myrtles, which stretched away up to the top.

A last effort was made! His head rose above the platform of the cone, and then, lying on his stomach, his eyes gazed at the eastern horizon.

It was the sea which formed it. Twenty miles off it united with the line of the sky!

He turned around.

Still sea—west of him, south of him, north of him! The immense ocean surrounding him on all sides!

"An island!"

As he uttered the word Godfrey felt his heart shrink. The thought had not occurred to him that he was on an island. And yet such was the case! The terrestrial chain which should have attached him to the continent was abruptly broken. He felt as though he had been a sleeping man in a drifted boat, who awoke with neither oar nor sail to help him back to shore.

But Godfrey was soon himself again. His part was taken, to accept the situation. If the chances of safety did not come from without, it was for him to contrive them.

He set to work at first then as exactly as possible to ascertain the disposition of this island which his view embraced over its whole length. He estimated that it ought to measure about sixty miles around, being, as far as he could see, about twenty miles long from south to north, and twelve miles wide from east to west.

Its central part was screened by the green depths of forest which extended up to the ridge dominated by the cone, whose slope died away on the shore.

All the rest was prairie, with clumps of trees, or beach with rocks, whose outer ring was capriciously tapered off in the form of capes and promontories. A few creeks cut out the coast, but could only afford refuge for two or three fishing boats.

The bay at the bottom of which the *Dream* lay shipwrecked was the only one of any size, and that extended over some seven or eight miles. An open roadstead, no vessel would have found it a safe shelter, at least unless the wind was blowing from the east.

But what was this island? To what geographical group did it belong? Did it form part of an archipelago, or was it alone in this portion of the Pacific?

In any case, no other island, large or small, high or low, appeared within the range of vision.

Godfrey rose and gazed around the horizon. Nothing was to be seen along the circular line where sea and sky

ran into each other. If, then, there existed to windward or to leeward any island or coast of a continent, it could only be at a considerable distance.

Godfrey called up all his geographical reminiscences, in order to discover what island of the Pacific this could be. In reasoning it out he came to this conclusion.

The *Dream* for seventeen days had steered very nearly south-west. Now with a speed of from 150 to 180 miles every four-and-twenty hours, she ought to have covered nearly fifty degrees. Now it was obvious that she had not crossed the equator. The situation of the island, or of the group to which it belonged, would therefore have to be looked for in that part of the ocean comprised between the 160th and 170th degrees of west longitude.

In this portion of the Pacific it seemed to Godfrey that the map showed no other archipelago than that of the Sandwich Islands, but outside this archipelago were there not any isolated islands whose names escaped him and which were dotted here and there over the sea up to the coast of the Celestial Empire?

It was not of much consequence. There existed no means of his going in search of another spot on the ocean which might prove more hospitable.

"Well," said Godfrey to himself, "if I don't know the name of this island, I'll call it Phina Island, in memory of her I ought never to have left to run about the world, and perhaps the name will bring us some luck."

Godfrey then occupied himself in trying to ascertain if the island was inhabited in the part which he had not yet been able to visit.

From the top of the cone he saw nothing which betrayed the presence of aborigines, neither habitations on the prairie nor houses on the skirt of the trees, not even a fisherman's hut on the shore.

But if the island was deserted, the sea which surrounded it was none the less so, for not a ship showed itself within the limits of what, from the height of the cone, was a considerable circuit.

Godfrey having finished his exploration had now only to get down to the foot of the hill and retake the road through the forest so as to rejoin Tartlet. But before he did so his eyes were attracted by a sort of cluster of trees

of huge stature, which rose on the boundary of the prairie toward the north. It was a gigantic group, it exceeded by a head all those which Godfrey had previously seen.

"Perhaps," he said, "it would be better to take up our quarters over there, more especially as, if I am not mistaken, I can see a stream which should rise in the central chain and flow across the prairie."

This was to be looked into on the morrow.

Toward the south the aspect of the island was slightly different. Forests and prairies rapidly gave place to the yellow carpet of the beach, and in places the shore was bounded with picturesque rocks.

But what was Godfrey's surprise, when he thought he saw a light smoke, which rose in the air beyond this rocky barrier.

"Are these any of our companions?" he exclaimed. "But no, it is not possible! Why should they have got so far from the bay since yesterday, and around so many miles of reef? Is it a village of fishermen, or the encampment of some indigenous tribe?"

Godfrey watched it with the closest attention. Was this gentle vapor which the breeze softly blew toward the west a smoke? Could he be mistaken? Anyhow it quickly vanished, a few minutes afterward nothing could be seen of it. It was a false hope.

Godfrey took a last look in its direction, and then seeing nothing, glided down the slope, and again plunged beneath the trees. An hour later he had traversed the forest and found himself on its skirt.

There Tartlet awaited him with his two-footed and four-footed flock. And how was the obstinate professor occupying himself? In the same way. A bit of wood was in his right hand, another piece in his left, and he still continued his efforts to set them alight. He rubbed and rubbed with a constancy worthy of a better fate.

"Well," he shouted as he perceived Godfrey some distance off—"and the telegraphic office?"

"It is not open!" answered Godfrey, who dared not yet tell him anything of the situation.

"And the post?"

"It is shut! But let us have something to eat!—I am dying with hunger! We can talk presently."

And this morning Godfrey and his companion had again to content themselves with a too meager repast of raw eggs and shell-fish.

"Wholesome diet!" repeated Godfrey to Tartlet, who was hardly of that opinion, and picked his food with considerable care.

CHAPTER X

A READY MADE HOUSE

THE day was already far advanced. Godfrey resolved to defer till the morrow the task of proceeding to a new abode. But to the pressing questions which the professor propounded on the results of his exploration he ended by replying that it was an island, Phina Island, on which they both had been cast, and that they must think of the means of living before dreaming of the means of departing.

"An island!" exclaimed Tartlet.

"Yes! It is an island!"

"Which the sea surrounds?"

"Naturally."

"But what is it?"

"I have told you, Phina Island, and you understand why I gave it that name."

"No, I do not understand!" answered Tartlet making a grimace; "and I don't see the resemblance! Miss Phina is surrounded by land, not water!"

After this melancholy reflection, he prepared to pass the night with as little discomfort as possible. Godfrey went off to the reef to get a new stock of eggs and mollusks, with which he had to be contented, and then, tired out, he came back to the tree and soon fell asleep, while Tartlet, whose philosophy would not allow him to accept such a state of affairs, gave himself over to the bitterest meditations. On the morrow, the 28th of June, they were both afoot before the cock had interrupted their slumbers.

To begin with, a hasty breakfast, the same as the day before. Only water from a little brook was advantageously replaced by a little milk given by one of the goats.

Ah! worthy Tartlet! Where were the "mint julep," the "port wine sangaree," the "sherry cobbler," the "sherry

cocktail," which were served him at all hours in the bars and taverns of San Francisco? How he envied the poultry, the agouties, and the sheep, who cheerfully quenched their thirst without the addition of such saccharine or alcoholic mixtures to their water from the stream! To these animals no fire was necessary to cook their food; roots and herbs and seeds sufficed, and their breakfast was always served to the minute on their tablecloth of green.

"Let us make a start," said Godfrey.

And behold the two on their way, followed by a procession of domestic animals, who refused to be left behind. Godfrey's idea was to explore, in the north of the island, that portion of the coast on which he had noticed the group of gigantic trees in his view from the cone. But to get there he resolved to keep along the shore. The surf might perhaps have cast up some fragment of the wreck. Perhaps they might find on the beach some of their companions in the *Dream* to which they could give Christian burial. As for finding any one of them living, it was hardly to be hoped for, after a lapse of six-and-thirty hours.

The first line of hills was surmounted, and Godfrey and his companion reached the beginning of the reef, which looked as deserted as it had when they had left it. There they renewed their stock of eggs and mollusks, in case they should fail to find even such meager resources away to the north. Then, following the fringe of sea-weed left by the last tide, they again ascended the dunes, and took a good look around.

Nothing! always nothing!

We must certainly say that if misfortune had made Crusoes of these survivors of the *Dream,* it had shown itself much more rigorous toward them than toward their predecessors, who always had some portion of the vessel left to them, and who, after bringing away numerous objects of necessity, had been able to utilize the timbers of the wreck. Victuals for a considerable period, clothes, tools, weapons, had always been left them with which to satisfy the elementary exigencies of existence. But here there was nothing of all this! In the middle of that dark night the ship had disappeared in the depths of the sea, without leaving on the reefs the slightest traces of its

wreck! It had not been possible to save a thing from her—not even a lucifer match—and to tell the truth, the want of that match was the most serious of all wants.

I know well, good people comfortably installed in your easy-chairs before a comfortable hearth at which is blazing brightly a fire of wood or coals, that you will be apt to say, "But nothing was more easy than for them to get a fire! There are a thousand ways of doing that! Two pebbles! A little dry moss! A little burned rag," but how do you burn the rag? "The blade of a knife would do for a steel, or two bits of wood rubbed briskly together in Polynesian fashion!" Well, try it!

It was about this that Godfrey was thinking as he walked, and this it was that occupied his thoughts more than anything else. Perhaps he, too, poking his coke fire and reading his travelers' tales, had thought the same as you good people! But now he had to put matters to the test, and he saw with considerable disquietude the want of a fire, that indispensable element which nothing could replace.

He kept on ahead, then, lost in thought, followed by Tartlet, who by his shouts and gestures, kept together the flock of sheep, agouties, goats, and poultry.

Suddenly his look was attracted by the bright colors of a cluster of small apples which hung from the branches of certain shrubs, growing in hundreds at the foot of the dunes. He immediately recognized them as "manzanillas," which serve as food to the Indians in certain parts of California. "At last," he exclaimed, "there is something which will be a change from our eggs and mussels."

"What? Do you eat those things?" said Tartlet with his customary grimace.

"You shall soon see!" answered Godfrey. And he set to work to gather the manzanillas, and eat them greedily.

They were only wild apples, but even their acidity did not prevent them from being agreeable. The professor made little delay in imitating his companion, and did not show himself particularly discontented at the work. Godfrey thought, and with reason, that from these fruits there could be made a fermented liquor which would be preferable to the water.

The march was resumed. Soon the end of the sand

dunes died away in a prairie traversed by a small stream. This was the one Godfrey had seen from the top of the cone. The large trees appeared further on, and after a journey of about nine miles the two explorers, tired enough by their four hours' walk, reached them a few minutes after noon. The site was well worth the trouble of looking at, of visiting, and, doubtless, occupying.

On the edge of a vast prairie, dotted with manzanilla bushes and other shrubs, there rose a score of gigantic trees which could have even borne comparison with the same species of the forests of California. They were arranged in a semi-circle. The carpet of verdure, which stretched at their feet, after bordering the stream for some hundreds of feet, gave place to a long beach, covered with rocks, and shingle, and sea-weed, which ran out into the water in a narrowing point to the north.

These "big trees," as they are commonly called in Western America, belong to the genus *Sequoia,* and are conifers of the fir family. If you ask the English for their distinguishing name, you will be told "Wellingtonias," if you ask the Americans, they will reply, "Washingtonias." But whether they recall the memory of the phlegmatic victor of Waterloo, or of the illustrious founder of the American Republic, they are the hugest products known of the Californian and Nevadan floras. In certain districts in these states there are entire forests of these trees, such as the groups at Mariposa and Calaveras, some of the trees of which measure from 60 to 80 feet in circumference, and some 300 feet in height. One of them, at the entrance of the Yosemite Valley, is quite 100 feet around. When living—for it is now prostrate—its first branches could have overtopped Strasburg Cathedral, or, in other words, were 80 feet from the ground.

Besides this tree there are "The Mother of the Forest," "The Beauty of the Forest," "The Hut of the Pioneer," "The Two Sentinels," "General Grant," "Miss Emma," "Miss Mary," "Brigham Young and His Wife," "The Three Graces," "The Bear," etc., etc.; all of them veritable vegetable phenomena. One of the trees has been sawed across at its base, and on it there has been built a ball-room, in which a quadrille of eight or ten couples can be danced with ease.

But the giant of giants, in a forest which is the property of the state, about fifteen miles from Murphy, is "The Father of the Forest," an old sequoia, 4000 years old, which rises 452 feet from the ground, higher than the cross of St. Peter's, at Rome, higher than the great pyramid of Ghizeh, higher than the iron bell-turret which now caps one of the towers of Rouen Cathedral.

It was a group of some twenty of these colossi that nature had planted on this point of the island, at the epoch, probably, when Solomon was building that temple at Jerusalem which has never risen from its ruins. The largest was, perhaps, 300 feet high, the smallest nearly 200.

Some of them, hollowed out by age, had enormous arches through their bases, beneath which a troop of horsemen could have ridden with ease.

Godfrey was struck with admiration in the presence of these natural phenomena, as they are not generally found at altitudes of less than from 5000 to 6000 feet above the level of the sea. He even thought that the view alone was worth the journey. Nothing he had seen was comparable to these columns of clear brown, which outlined themselves almost without sensible diminution of their diameters to their lowest fork. The cylindrical trunks rising from 80 to 100 feet above the earth, ramified into such thick branches that they themselves looked like tree-stems of huge dimensions bearing quite a forest in the air.

One of these specimens of *Sequoia gigantea*—one of the biggest in the group—more particularly attracted Godfrey's attention.

Gazing at its base it displayed an opening of from four to five feet in width, and ten feet high, which gave entrance to its interior. The giant's heart had disappeared, the alburnum had been dissipated into soft whitish dust; but if the tree did not depend so much on its powerful roots as on its solid bark, it could still keep its position for centuries.

"In default of a cavern or a grotto," said Godfrey, "here is a ready-made dwelling. A wooden house, a tower, such as there is in no inhabited land. Here we can be sheltered and shut in. Come along, Tartlet! come!"

And the young man, catching hold of his companion, dragged him inside the sequoia.

The base was covered with a bed of vegetable dust, and in diameter could not be less than twenty feet.

As for the height to which its vault extended, the gloom prevented even an estimate. For not a ray of light found its way through the bark wall. Neither cleft nor fault was there through which the wind or rain could come. Our two Crusoes would therein find themselves in a position to brave with impunity the inclemency of the weather. No cave could be firmer, or drier, or more compact. In truth it would have been difficult to have anywhere found a better.

"Eh, Tartlet, what do you think of our natural house?" asked Godfrey.

"Yes, but the chimney?" answered Tartlet.

"Before we talk about the chimney," replied Godfrey, "let us wait till we have the fire!"

This was only logical.

Godfrey went to reconnoiter the neighborhood. As we have said, the prairie extended to this enormous mass of sequoias which formed its edge. The small stream meandering through the grassy carpet gave a healthy freshness to its borders, and thereon grew shrubs of different kinds. Farther off, on ground that grew gradually higher, were scattered several clumps of trees, but of great stature as they were, they seemed but simple underwood by the side of the "mammoths," whose huge shadows the sun was throwing even into the sea. Across the prairie lay minor lines of bushes, and vegetable clumps and verdant thickets, which Godfrey resolved to investigate on the following day.

If the site pleased him, it did not displease the domestic animals. Agouties, goats, and sheep had soon taken possession of this domain, which offered them roots to nibble at, and grass to browse on far beyond their needs. As for the fowls they were greedily pecking away at the seeds and worms in the banks of the rivulet. Animal life was already manifesting itself in such goings and comings, such flights and gambols, such bleatings and gruntings and cluckings as had doubtless never been heard of in these parts before.

Then Godfrey returned to the clump of sequoias, and made a more attentive examination of the tree in which he had chosen to take up his abode. It appeared to him that it would be difficult, if not impossible, to climb into

the first branches, at least by the exterior; for the trunk presented no protuberances. Inside it the ascent might be easier, if the tree were hollow up to the fork.

In case of danger it would be advisable to seek refuge among the thick boughs borne by the enormous trunk. But this matter could be looked into later on.

When he had finished his inquiries the sun was low on the horizon, and it seemed best to put off till tomorrow the preparations for definitely taking up their abode.

But, after a meal with dessert composed of wild apples, what could they do better than pass the night on a bed of the vegetable dust which covered the ground inside the sequoia?

And this, under the keeping of Providence, was what was done but not until after Godfrey in remembrance of his uncle William W. Kolderup, had given to the giant the name of "Will Tree," just as its prototypes in the forests of California and the neighboring states bear the names of the great citizens of the American Republic.

CHAPTER XI

A THUNDER-BOLT

It must be acknowledged that Godfrey was in a fair way to become a new man in this completely novel position to one so frivolous, so light-minded, and so thoughtless. He had hitherto only had to allow himself to live. Never had care for the morrow disquieted his rest. In the opulent mansion in Montgomery Street, where he slept his ten hours without a break, not the fall of a rose leaf had ever troubled his slumbers.

It was so no longer. On this unknown land he found himself thoroughly shut off from the rest of the world, left entirely to his own resources, obliged to face the necessities of life under conditions in which a man even much more practical might have been in great difficulty. Doubtless when it was found that the *Dream* did not return, a search for him would be made. But what were these two? Less than a needle in a hayrick, or a sand-grain on the sea-bottom! The incalculable fortune of Uncle Kolderup could not do everything.

When Godfrey had found his fairly acceptable shelter, his sleep in it was by no means undisturbed. His brain traveled as it had never done before. Ideas of all kinds were associated together: those of the past which he bitterly regretted, those of the present of which he sought the realization, those of the future which disquieted him more than all!

But in these rough trials, the reason and, in consequence, the reasoning which naturally flows from it, were little by little freed from the limbo in which they had hitherto slept. Godfrey was resolved to strive against his ill-luck, and to do all he could to get out of his difficulties. If he escaped, the lesson would certainly not be lost on him for the future.

At daybreak he was astir, with the intention of proceeding to a more complete installation. The question of food, above all that of fire, which was connected with it, occupied the first place; then there were tools or arms to make, clothes to procure, unless they were anxious of soon appearing attired in Polynesian costume.

Tartlet still slumbered. You could not see him in the shadow, but you could hear him. That poor man, spared from the wreck, remained as frivolous at forty-five as his pupil had formerly been. He was a gain in no sense. He even might be considered an incubus, for he had to be cared for in all ways. But he was a companion!

He was worth more in that than the most intelligent dog, although he was probably of less use! He was a creature able to talk—although only at random; to converse—if the matter were never serious; to complain—and this he did most frequently! As it was, Godfrey was able to hear a human voice. That was worth more than the parrot's in Robinson Crusoe! Even with a Tartlet he would not be alone, and nothing was so disheartening as the thcught of absolute solitude.

"Crusoe before Friday, Crusoe after Friday; what a difference!" thought he.

However, on this morning, that of June 29th, Godfrey was not sorry to be alone, so as to put into execution his project of exploring the group of sequoias. Perhaps he would be fortunate enough to discover some fruit, some edible root, which he could bring back—to the extreme

satisfaction of the professor. And so he left Tartlet to his dreams, and set out.

A light fog still shrouded the shore and the sea, but already it had commenced to lift in the north and east under the influence of the solar rays, which little by little were condensing it. The day promised to be fine. Godfrey, after having cut himself a substantial walking stick, went for two miles along that part of the beach which he did not know, and which formed the outstretched point of Phina Island.

There he made a first meal of shell-fish, mussels, clams, and especially some capital little oysters which he found in great abundance.

"If it comes to the worst," he said to himself, "we need never die of hunger! Here are thousands of dozens of oysters to satisfy the calls of the most imperious stomach! If Tartlet complains, it is because he does not like mollusks! Well, he will have to like them!"

Decidedly, if the oyster did not absolutely replace bread and meat, it furnished an aliment in no whit less nutritive and in a condition capable of being absorbed in large quantities. But though this mollusk is of very easy digestion, it is somewhat dangerous in its use, to say nothing of its abuse.

This breakfast ended, Godfrey again seized his stick, and struck off obliquely toward the south-east, so as to walk up the right bank of the stream. In this direction, he would cross the prairie up to the groups of trees observed the night before beyond the long lines of shrubs and underwood, which he wished to examine carefully.

Fortunately when Godfrey reached the first line of shrubs he recognized two sorts of fruits or roots. One sort had to pass through the fiery trial before being eaten, the other was edible in its natural state. The first was a shrub of the kind called "camas," which thrives even in lands unfit for culture. The other bush produces a species of bulb of oblong form, bearing the indigenous name of "yam," and if it possesses less nutritive principles than the camas, it is much better for one thing—it can be eaten raw.

Godfrey, highly pleased at his discovery, at once satisfied his hunger on a few of these excellent roots, and not forgetting Tartlet's breakfast, collected a large bundle, and

throwing it over his shoulder, retook the road to Will Tree. That he was well received on his arrival with the crop of yams need not be insisted on. The professor greedily regaled himself, and his pupil had to caution him to be moderate.

"Ah!" he said. "We have got some roots today. Who knows whether we shall have any tomorrow?"

"Without any doubt," replied Godfrey, "tomorrow and the day after, and always. There is only the trouble of going and fetching them."

"Well, Godfrey, and the camas?"

"Of the camas we will make flour and bread when we have got a fire."

"Fire!" exclaimed the professor, shaking his head. "Fire! And how shall we make it?"

"I don't know yet, but somehow or other we will get at it."

"May Heaven hear you, my dear Godfrey! And when I think that there are so many fellows in this world who have only got to rub a bit of wood on the sole of their boot to get it, it annoys me! No! Never would I have believed that ill-luck would have reduced me to this state! You need not take three steps down Montgomery Street, before you will meet with a gentleman, cigar in mouth, who thinks it a pleasure to give you a light, and here—"

"Here we are not in San Francisco, Tartlet, nor in Montgomery Street, and I think it would be wiser for us not to reckon on the kindness of those we meet!"

"But, why is cooking necessary for bread and meat? Why did not nature make us so that we might live upon nothing?"

"That will come, perhaps!" answered Godfrey with a good-humored smile.

"Do you think so?"

"I think that our scientists are probably working out the subject."

"Is it possible! And how do they start on their research as to this new mode of alimentation?"

"On this line of reasoning," answered Godfrey, "as the functions of digestion and respiration are connected, the endeavor is to substitute one for the other. Hence the day when chemistry has made the aliments necessary for

the food of man capable of assimilation by respiration, the problem will be solved. There is nothing wanted beyond rendering the air nutritious. You will breathe your dinner instead of eating it, that is all!"

"Ah! Is it not a pity that this precious discovery is not yet made!" exclaimed the professor. "How cheerfully would I breathe half a dozen sandwiches and a silverside of beef, just to give me an appetite!"

And Tartlet plunged into a semi-sensuous reverie, in which he beheld succulent atmospheric dinners, and at them unconsciously opened his mouth and breathed his lungs full, oblivious that he had scarcely the wherewithal to feed upon in the ordinary way.

Godfrey aroused him from his meditation, and brought him back to the present. He was anxious to proceed to a more complete installation in the interior of Will Tree.

The first thing to do was to clean up their future dwelling-place. It was at the outset necessary to bring out several bushels of that vegetable dust which covered the ground and in which they sank almost up to their knees. Two hours' work hardly sufficed to complete this troublesome task, but at length the chamber was clear of the pulverulent bed, which rose in clouds at the slightest movement.

The ground was hard and firm, as if floored with joists, the large roots of the sequoia ramifying over its surface. It was uneven but solid. Two corners were selected for the beds, and of these several bundles of herbage, thoroughly dried in the sun, were to form the materials. As for other furniture, benches, stools, or tables, it was not impossible to make the most indispensable things, for Godfrey had a capital knife, with its saw and gimlet. The companions would have to keep inside during rough weather, and they could eat and work there. Daylight did not fail them, for it streamed through the opening. Later on, if it became necessary to close this aperture for greater safety, Godfrey could try and pierce one or two embrasures in the bark of the sequoia to serve as windows.

As for discovering to what height the opening ran up into the trunk, Godfrey could not do so without a light. All that he could do was to find out with the aid of a pole

ten or twelve feet long, held above his head, that he could not touch the top.

The question, however, was not an urgent one. It would be solved eventually.

The day passed in these labors, which were not ended at sunset. Godfrey and Tartlet, tired as they were, found their novel bed-clothes formed of the dried herbage, of which they had an ample supply, most excellent; but they had to drive away the poultry who would willingly have roosted in the interior of Will Tree. Then occurred to Godfrey the idea of constructing a poultry-house in some other sequoia, as, to keep them out of the common room, he was building up a hurdle of brushwood. Fortunately neither the sheep nor the agouties, nor the goats experienced the like temptation. These animals remained quietly outside, and had no fancy to get through the insufficient barrier.

The following days were employed in different jobs, in fitting up the house or bringing in food; eggs and shellfish were collected, yam roots and manzanilla apples were brought in, and oysters, for which each morning they went to the bank or the shore. All this took time, and the hours passed away quickly.

The "dinner things" consisted now of large bivalve shells, which served for dishes or plates. It is true that for the kind of food to which the hosts of Will Tree were reduced, others were not needed.

There was also the washing of the linen in the clear water of the stream, which occupied the leisure of Tartlet. It was to him that this task fell; but he only had to see to the two shirts, two handkerchiefs, and two pairs of socks, which composed the entire wardrobe of both.

While this operation was in progress, Godfrey and Tartlet had to wear only waistcoat and trousers, but in the blazing sun of that latitude the clothes quickly dried. And so matters went on without either rain or wind till July 3rd. Already they had begun to be fairly comfortable in their new home, considering the condition in which they had been cast on the island.

However, it was advisable not to neglect the chances of safety which might come from without. Each day Godfrey examined the whole sector of sea which extended

from the east to the north-west beyond the promontory.

This part of the Pacific was always deserted. Not a vessel, not a fishing-boat, not a ribbon of smoke detaching itself from the horizon, proclaimed the passage of a steamer. It seemed that Phina Island was situated out of the way of all the itineraries of commerce. All they could do was to wait, trusting in the Almighty, who never abandons the weak.

Meanwhile, when their immediate necessities allowed them leisure, Godfrey, incited by Tartlet, returned to that important and vexed question of the fire. It was possible that some of the varieties of mushrooms which grew in the crevices of the old trees, after having been subjected to prolonged drying, might be transformed into a combustible substance. Many of these mushrooms were collected and exposed to the direct action of the sun, until they were reduced to powder. Then with the back of his knife, Godfrey endeavored to strike some sparks off with a flint, so that they might fall on this substance. It was useless. The spongy stuff would not catch fire. Godfrey then tried to use that fine vegetable dust, dried during so many centuries, which he had found in the interior of Will Tree. The result was equally discouraging.

In desperation he then, by means of his knife and flint, strove to secure the ignition of a sort of sponge which grew under the rocks. He fared no better. The particle of steel, lighted by the impact of the silex, fell onto the substance, but went out immediately. Godfrey and Tartlet were in despair. To do without fire was impossible. Of their fruits and mollusks they were getting tired, and their stomaches began to revolt at such food. They eyed—the professor especially—the sheep, agouties, and fowls which went and came around Will Tree. The pangs of hunger seized them as they gazed. With their eyes they ate the living meat!

No! It could not go on like this!

But an unexpected circumstance, a providential one if you will, came to their aid. In the night of the 3rd of July the weather, which had been on the change for a day or so, grew stormy, after an oppressive heat which the sea-breeze had been powerless to temper.

Godfrey and Tartlet at about one o'clock in the morn-

ing were awakened by heavy claps of thunder, and most vivid flashes of lightning. It did not rain as yet, but it promised to do so, and then regular cataracts would be precipitated from the cloudy zone, owing to the rapid condensation of the vapor.

Godfrey got up and went out so as to observe the state of the sky. There seemed quite a conflagration above the domes of the giant trees and the foliage appeared on fire against the sky, like the fine network of a Chinese shadow.

Suddenly, in the midst of the general uproar, a vivid flash illuminated the atmosphere. The thunder-clap followed immediately, and Will Tree was permeated from top to bottom with the electric force.

Godfrey, staggered by the return shock, stood in the midst of a rain of fire which showered around him. The lightning had ignited the dry branches above him. They were incandescent particles of carbon which crackled at his feet.

Godfrey with a shout awoke his companion. "Fire! Fire!"

"Fire!" answered Tartlet. "Blessed be Heaven which sends it to us!"

Instantly they possessed themselves of the flaming twigs, of which some still burned, while others had been consumed in the flames. Hurriedly, at the same time, did they heap together a quantity of dead wood such as was never wanting at the foot of the sequoia, whose trunk had not been touched by the lightning.

Then they returned into their gloomy habitation as the rain, pouring down in sheets, extinguished the fire which threatened to devour the upper branches of Will Tree.

CHAPTER XII

MYSTERIES BEGIN

THAT was a storm which came just when it was wanted! Godfrey and Tartlet had not, like Prometheus, to venture into space to bring down the celestial fire! "It was," said Tartlet, "as if the sky had been obliging enough to send it down to us on a lightning flash."

With them now remained the task of keeping it!

"No! we must not let it go out!" Godfrey had said.

"Not until the wood fails us to feed it!" had responded Tartlet, whose satisfaction showed itself in little cries of joy.

"Yes! but who will keep it in?"

"I! I will! I will watch it day and night, if necessary," replied Tartlet, brandishing a flaming bough.

And he did so till the sun rose.

Dry wood, as we have said, abounded beneath the sequoias. Until the dawn Godfrey and the professor, after heaping up a considerable stock, did not spare to feed the fire. By the foot of one of the large trees in a narrow space between the roots the flames leaped up, crackling clearly and joyously. Tartlet exhausted his lungs blowing away at it, although his doing so was perfectly useless. In this performance he assumed the most characteristic attitudes in following the grayish smoke whose wreaths were lost in the foliage above.

But it was not that they might admire it that they had so longingly asked for this indispensable fire, nor to warm themselves at it. It was destined for a much more interesting use. There was to be an end of their miserable meals of raw mollusks and yam roots, whose nutritive elements boiling water and simple cooking in the ashes had never developed. It was in this way that Godfrey and Tartlet employed it during the morning.

"We could eat a fowl or two!" exclaimed Tartlet, whose jaws moved in anticipation. "Not to mention an agouti ham, a leg of mutton, a quarter of goat, some of the game on the prairie, without counting two or three freshwater fish and a sea fish or so."

"Not so fast," answered Godfrey, whom the declaration of this modest bill of fare had put in good humor. "We need not risk indigestion to satisfy a fast! We must look after our reserves, Tartlet! Take a couple of fowls —one apiece—and if we want bread, I hope that our camas roots can be so prepared as to replace it with advantage!"

This cost the lives of two innocent hens, who, plucked, trussed, and dressed by the professor, were stuck on a stick, and soon roasted before the crackling flames.

Meanwhile, Godfrey was getting the camas roots in a state to figure creditably at the first genuine breakfast on

Phina Island. To render them edible it was only necessary to follow the Indian method, which the Californians were well acquainted with.

This was what Godfrey did. A few flat stones selected from the beach were thrown in the fire so as to get intensely hot. Tartlet seemed to think it a great shame to use such a good fire "to cook stones with," but as it did not hinder the preparation of his fowls in any way he had no other complaint to make.

While the stones were getting warm Godfrey selected a piece of ground about a yard square from which he tore up the grass; then with his hands armed with large scallop shells he dug the soil to the depth of about ten inches. That done he laid at the bottom of the cavity a fire of dry wood, which he so arranged as to communicate to the earth heaped up at its bottom some considerable heat.

When all the wood had been consumed and the cinders taken away, the camas roots, previously cleaned and scraped, were strewn in the hole, a thin layer of sods thrown over them and the glowing stones placed on the top, so as to serve as the basis of a new fire which was lighted on their surface.

In fact, it was a kind of oven which had been prepared; and in a very short time—about half an hour or so—the operation was at an end.

Beneath the double layer of stones and sods lay the roots cooked by this violent heating. On crushing them there was obtainable a flour well fitted for making into bread, but, even eaten as they were, they proved much like potatoes of highly nutritive quality.

It was thus that this time the roots were served, and we leave our readers to imagine what a breakfast our two friends made on the chickens which they devoured to the very bones, and on the excellent camas roots, of which they had no need to be sparing. The field was not far off where they grew in abundance. They could be picked up in hundreds by simply stooping down for them.

The repast over, Godfrey set to work to prepare some of the flour, which keeps for any length of time, and which could be transformed into bread for their daily wants.

The day was passed in different occupations. The fire was kept up with great care. Particularly was the fuel

heaped on for the night; and Tartlet, nevertheless, arose on many occasions to sweep the ashes together and provoke a more active combustion. Having done this, he would go to bed again, to get up as soon as the fire burned low, and thus he occupied himself till the day broke. The night passed without incident, the cracklings of the fire and the crow of the cock awoke Godfrey and his companion, who had ended his performances by falling off to sleep.

At first Godfrey was surprised at feeling a current of air coming down from above in the interior of Will Tree. He was thus led to think that the sequoia was hollow up to the junction of the lower branches where there was an opening which they would have to stop up if they wished to be snug and sheltered.

"But it is very singular!" said Godfrey to himself.

"How was it that during the preceding nights I did not feel this current of air? Could it have been the lightning?"

And to get an answer to this question, the idea occurred to him to examine the trunk of the sequoia from the outside.

When he had done so, he understood what had happened during the storm.

The track of the lightning was visible on the tree, which had had a long strip of its bark torn off from the fork down to the roots.

Had the electric spark found its way into the interior of the sequoia in place of keeping to the outside, Godfrey and his companion would have been struck. Most decidedly they had had a narrow escape.

"It is not a good thing to take refuge under trees during a storm," said Godfrey. "That is all very well for people who can do otherwise. But what way have we to avoid the danger who live inside the tree? We must see!"

Then examining the sequoia from the point where the long lightning trace began—"It is evident," said he, "that where the flash struck the tree has been cracked. But since the air penetrates by this orifice the tree must be hollow along its whole length, and only lives in its bark. Now that is what I ought to see about!"

And Godfrey went to look for a resinous piece of wood that might do for a torch.

A bundle of pine twigs furnished him with the torch he needed, as from them exuded a resin which, once inflamed, gave forth a brilliant light.

Godfrey then entered the cavity which served him for his house. To darkness immediately succeeded light, and it was easy to see the state of the interior of Will Tree.

A sort of vault of irregular formation stretched across in a ceiling some fifteen feet above the ground. Lifting his torch Godfrey distinctly saw that into this there opened a narrow passage whose further development was lost in the shadow. The tree was evidently hollow throughout its length; but perhaps some portion of the alburnum still remained intact. In that case, by the help of the protuberances it would be possible if not easy to get up to the fork.

Godfrey, who was thinking of the future, resolved to know without delay if this were so.

He had two ends in view; one, to securely close the opening by which the rain and wind found admission, and so render Will Tree almost habitable; the other, to see if, in case of danger, or an attack from animals or savages, the upper branches of the tree would not afford a convenient refuge. He could but try. If he encountered any insurmountable obstacle in the narrow passage, Godfrey could be got down again.

After firmly sticking his torch between two of the roots below, behold him then commencing to raise himself on to the first interior knots of the bark. He was lithe, strong, and accustomed to gymnastics like all young Americans. It was only sport to him. Soon he had reached in this uneven tube a part much narrower, in which, with the aid of his back and knees, he could work his way upward like a chimney-sweep. All he feared was that the hole would not continue large enough for him to get up.

However, he kept on, and each time he reached a projection he would stop and take breath.

Three minutes after leaving the ground, Godfrey had mounted about sixty feet, and consequently could only have about twenty feet further to go.

In fact, he already felt the air blowing more strongly

on his face. He inhaled it greedily, for the atmosphere inside the sequoia was not particularly fresh.

After resting for a minute, and shaking off the fine dust which he had rubbed on to him off the wall, Godfrey started again up the long tunnel, which gradually narrowed.

But at this moment his attention was attracted by a peculiar noise, which appeared to him somewhat suspicious. There was a sound of scratching, up the tree. Almost immediately a sort of hissing was heard.

Godfrey stopped.

"What is that?" he asked. "Some animal taken refuge in the sequoia? Is it a snake? No! We have not yet seen one on the island! Perhaps it is a bird that wants to get out!"

Godfrey was not mistaken; and as he continued to mount, a cawing, followed by a rapid flapping of wings showed him that it was some bird ensconced in the tree whose sleep he was doubtless disturbing.

It proved to be a kind of jackdaw, of huge stature, which scuttled out of the opening, and disappeared into the summit of Will Tree.

A few seconds afterward, Godfrey's head appeared through the same opening, and he soon found himself quite at his ease, installed on a fork of the tree where the lower branches gave off, at about eighty feet from the ground.

There, as has been seen, the enormous stem of the sequoia supported quite a forest. The capricious network of its upper boughs presented the aspect of a wood crowded with trees, which no gap rendered passable.

However, Godfrey managed, not without difficulty, to get along from one branch to another, so as to gain little by little the upper story of this vegetable phenomenon.

A number of birds with many a cry flew off at his approach, and hastened to take refuge in the neighboring members of the group, above which Will Tree towered by more than a head.

Godfrey continued to climb as well as he could, and did not stop until the ends of the higher branches began to bend beneath his weight.

A huge horizon of water surrounded Phina Island, which lay unrolled like a relief-map at his feet. Greedily his

eyes examined that portion of the sea. It was still deserted. He had to conclude once more, that the island lay away from the trade routes of the Pacific.

Godfrey uttered a heavy sigh; then his look fell on the narrow domain on which fate had condemned him to live, doubtless for long, perhaps forever.

But what was his surprise when he saw, this time away to the north, a smoke similar to that which he had already thought he had seen in the south. He watched it with the keenest attention. A very light vapor, calm and pure, grayish blue at its tip, rose straight in the air.

"No! I am not mistaken!" exclaimed Godfrey. "There is smoke, and therefore a fire which produces it! And that fire could not have been lighted except by—by whom?"

Godfrey then, with extreme precision, took the bearings of the spot in question. The smoke was rising in the north-east of the island, amid the high rocks which bordered the beach. There was no mistake about that. It was less than five miles from Will Tree. Striking straight to the north-east across the prairie, and then following the shore, he could not fail to find the rocks above which the vapor rose.

With beating heart Godfrey made his way down the scaffolding of branches until he reached the fork. There he stopped an instant to clear off the moss and leaves which clung to him, and that done he slid down the opening, which he enlarged as much as possible, and rapidly gained the ground. A word to Tartlet not to be uneasy at his absence, and Godfrey hastened off in the north-easterly direction so as to reach the shore.

It was a two hours' walk across the verdant prairie, through clumps of scattered trees, or hedges of spiny shrubs, and then along the beach. At length the last chain of rocks was reached.

But the smoke which Godfrey had seen from the top of the tree he searched for in vain when he had reached the ground. As he had taken the bearings of the spot with great care, he came toward it without any mistake.

There Godfrey began his search. He carefully explored every nook and corner of this part of the shore. He called. No one answered to his shout. No human being

appeared on the beach. Not a rock gave him a trace of a newly lighted fire—nor of a fire now extinct, which could have been fed by sea herbs and dry algae thrown up by the tide.

"But it is impossible that I should have been mistaken!" repeated Godfrey to himself. "I am sure it was smoke that I saw! And besides!—" As Godfrey could not admit that he had been the dupe of a delusion, he began to think that there must exist some well of heated water, or kind of intermittent geyser, which he could not exactly find, but which had given forth the vapor. There was nothing to show that in the island there were not many such natural wells, and the apparition of the column of smoke could be easily explained by so simple a geological phenomenon.

Godfrey left the shore and returned toward Will Tree, observing the country as he went along a little more carefully than he had done as he came. A few ruminants showed themselves, among others some wapiti, but they dashed past with such speed that it was impossible to get near them.

In about four hours Godfrey got back. Just before he reached the tree he heard the shrill "twang! squeak!" of the kit, and soon found himself face to face with Professor Tartlet, who, in the attitude of a vestal, was watching the sacred fire confided to his keeping.

CHAPTER XIII

SOME WRECKAGE AT LAST

To PUT up with what you cannot avoid is a philosophical principle, that may not perhaps lead you to the accomplishment of great deeds, but is assuredly eminently practical. On this principle Godfrey had resolved to act for the future. If he had to live on this island, the wisest thing for him to do was to live there as comfortably as possible until an opportunity offered for him to leave it.

And so, without delay, he set to work to get the interior of Will Tree into some order. Cleanliness was of the first importance. The beds of dried grass were frequently renewed. The plates and dishes were only scallop shells,

it is true, but no American kitchen could show cleaner ones. It should be said to his praise that Professor Tartlet was a capital washer. With the help of his knife, Godfrey, by flattening out a large piece of bark, and sticking four uprights into the ground, had contrived a table in the middle of the room. Some large stumps served for stools. The comrades were no longer reduced to eating on their knees, when the weather prevented their dining in the open air.

There was still the question of clothing, which was of great interest to them, and they did the best they could. In that climate, and under that latitude, there was no reason why they should not go about half naked; but, at length, trousers, waistcoat, and linen shirt would be all worn out. How could they replace them? Were the sheep and the goats to provide them with skins for clothing, after furnishing them with flesh for food? It looked like it. Meanwhile, Godfrey had the few garments he possessed frequently washed. It was on Tartlet, transformed into a laundress, that this task fell, and he acquitted himself of it to the general satisfaction.

Godfrey busied himself specially in providing food, and in arranging matters generally. He was, in fact, the caterer. Collecting the edible roots and the manzanilla fruit occupied him some hours every day; and so did fishing with plaited rushes, sometimes in the waters of the stream, and sometimes in the hollows of the rocks on the beach when the tide had gone out. The means were primitive, no doubt, but from time to time a fine crustacean or a succulent fish figured on the table of Will Tree, to say nothing of the mollusks, which were easily caught by hand.

But we must confess that the pot—of all the pieces in the battery of the cook undoubtedly the most essential—the simple iron pot was wanting. Its absence could not but be deeply felt. Godfrey knew not how to replace the vulgar pipkin, whose use is universal. No hash, no stew, no boiled meat, no fish, nothing but roasts and grills. No soup appeared at the beginning of the meal. Constantly and bitterly did Tartlet complain—but how to satisfy the poor man?

Godfrey was busied with other cares. In visiting the

different trees of the group he had found a second sequoia of great height, of which the lower part, hollowed out by the weather, was very rugged and uneven.

Here he devised his poultry house, and in it the fowls took up their abode. The hens soon became accustomed to their home, and settled themselves to set on eggs placed in the dried grass, and chickens began to multiply. Every evening the broods were driven in and shut up, so as to keep them from birds of prey, who, aloft in the branches, watched their easy victims, and would, if they could, have ended by destroying them.

As for the agouties, the sheep, and the goats, it would have been useless then to have looked out a stable or a shelter for them. When the bad weather came, there would be time enough to see to that. Meanwhile, they prospered on the luxuriant pasturage of the prairie, with its abundance of sainfoin and edible roots, of which the porcine representatives showed genuine appreciation. A few kids had been dropped since the arrival in the island, and as much milk as possible was left to the goats with which to nourish their little ones.

From all this it resulted that the surroundings of Will Tree were quite lively. The well-fed domestic animals came during the warm hours of the day to find there a refuge from the heat of the sun. No fear was there of their wandering abroad, or of their falling prey to wild beasts, of which Phina Island seemed to contain not a single specimen.

And so things went on, with a present fairly comfortable perhaps, but a future very disquieting, when an unexpected incident occurred which bettered the position considerably.

It was on the 29th of July. Godfrey was strolling in the morning along that part of the shore which formed the beach of the large bight to which he had given the name of Dream Bay. He was exploring it to see if it was as rich in shell-fish as the coast on the north. Perhaps he still hoped that he might yet come across some of the wreck, of which it seemed to him so strange that the tide had as yet brought in not a single fragment.

On this occasion he had advanced to the northern point which terminated in a sandy spit, when his attention was

attracted by a rock of curious shape, rising near the last group of algae and sea-weeds.

A strange presentiment made him hasten his steps. What was his surprise, and his joy, when he saw that what he had taken for a rock was a box, half buried in the sand.

Was it one of the packages of the *Dream?* Had it been here ever since the wreck? Was it not rather all that remained of another and more recent catastrophe? It was difficult to say. In any case no matter whence it came or what it held, the box was a valuable prize.

Godfrey examined it outwardly. There was no trace of an address—not even a name, not even one of those huge initials cut out of thin sheet metal which ornament the boxes of the Americans. Perhaps he would find inside it some paper which would indicate the origin, or nationality, or name of the proprietor? Anyhow it was apparently hermetically sealed, and there was hope that its contents had not been spoiled by their sojourn in the sea-water. It was a very strong wooden box, covered with thick leather, with copper corner plates at the angles, and large straps all over it.

Impatient as he was to view the contents of the box, Godfrey did not think of damaging it, but of opening it after destroying the lock; as to transporting it from the bottom of Dream Bay to Will Tree, its weight forbade it, and he never gave that a thought.

"Well," said Godfrey to himself, "we must empty it where it is, and make as many journeys as may be necessary to take away all that is inside."

It was about four miles from the end of the promontory to the group of sequoias. It would therefore take some time to do this, and occasion considerable fatigue. Time did not press, however. As for the fatigue, it was hardly worth thinking about.

What did the box contain? Before returning to Will Tree, Godfrey had a try at opening it. He began by unbuckling the straps, and once they were off he very carefully lifted the leather shield which protected the lock. But how was he to force it?

It was a difficult job. Godfrey had no lever with which to bring his strength to bear. He had to guard against

the risk of breaking his knife, and so he looked about for a heavy stone with which he could start the staple. Godfrey picked out one as thick as his wrist, and with it he gave a tremendous whack on the plate of copper.

To his extreme surprise the bolt shot through the staple immediately gave way. Either the staple was broken by the blow, or the lock was not turned. Godfrey's heart beat high as he stooped to lift up the box lid.

It rose unchecked, and in truth had Godfrey had to get it to pieces he would not have done so without trouble. The trunk was a regular strong-box. The interior was lined with sheet zinc, so that the sea-water had failed to penetrate. The objects it contained, however delicate they might be, would be found in a perfect state of preservation.

And what objects! As he took them out Godfrey could not restrain exclamations of joy. Most assuredly the box must have belonged to some highly practical traveler, who had reckoned on getting into a country where he would have to trust to his own resources.

In the first place there was linen—shirts, table-cloths, sheets, counterpanes; then clothes—woolen jerseys, woolen socks, cotton socks, cloth trousers, velveteen trousers, knitted waistcoats, waistcoats of good heavy stuffs; then two pairs of strong boots, and hunting-shoes and felt hats.

Then came a few kitchen and toilet utensils; and an iron pot—the famous pot which was wanted so badly—a kettle, a coffee-pot, a tea-pot, some spoons, some forks, some knives, a looking-glass, and brushes of all kinds, and, what was by no means to be despised, three cans, containing about fifteen pints of brandy and tafia, and several pounds of tea and coffee.

Then, in the third place, came some tools—an auger, a gimlet, a handsaw, an assortment of nails and brads, a spade, a shovel, a pickaxe, a hatchet, an adze, etc., etc.

In the fourth place there were some weapons, two hunting-knives in their leather sheaths, a carbine and two muskets, three six-shooter revolvers, a dozen pounds of powder, many thousand caps, and an important stock of lead and bullets, all the arms seeming to be of English make. There was also a small medicine-chest, a telescope, a compass, and a chronometer. There were also a few

English books, several quires of blank paper, pencils, pens, and ink, an almanac, a Bible with a New York imprint, and a "Complete Cook's Manual."

Verily this is an inventory of what under the circumstances was an inestimable prize. Godfrey could not contain himself for joy. Had he expressly ordered the trousseau for the use of shipwrecked folks in difficulties, he could not have made it more complete. Abundant thanks were due for it to Providence. And Providence had the thanks, and from an overflowing heart.

Godfrey indulged himself in the pleasure of spreading out all his treasure on the beach. Every object was looked over, but not a scrap of paper was there in the box to indicate to whom it belonged, or the ship on which it had been embarked. Around, the sea showed no signs of a recent wreck.

Nothing was there on the rocks, nothing on the sands. The box must have been brought in by the flood, after being afloat for perhaps many days. In fact, its size in proportion to its weight gave it sufficient buoyancy.

The two inhabitants of Phina Island would for some time be kept provided in a large measure with the material wants of life,—tools, arms, instruments, utensils, clothes—due to the luckiest of chances.

Godfrey did not dream of taking all the things to Will Tree at once. Their transport would necessitate several journeys, but he would have to make haste for fear of bad weather. Godfrey then put back most of the things in the box. A gun, a revolver, a certain quantity of powder and lead, a hunting-knife, the telescope, and the iron pot, he took as his first load.

The box was carefully closed and strapped up, and with a rapid step Godfrey strode back along the shore.

"Ah! What a reception he had from Tartlet, an hour later! And the delight of the Professor when his pupil ran over the list of their new riches! The pot—that pot above everything—threw him into transports of joy, culminating in a series of "hornpipes" and "cellar-flaps," wound up by a triumphant "six-eight breakdown."

It was only noon as yet. Godfrey wished after the meal to get back at once to Dream Bay. He would never rest until the whole was in safety at Will Tree.

Tartlet made no objection, and declared himself ready to start. It was no longer necessary to watch the fire. With the powder they could always get a light. But the Professor was desirous that during their absence the soup which he was thinking about might be kept gently on the simmer. The wonderful pot was soon filled with water from the stream, a whole quarter of a goat was thrown in, accompanied by a dozen yam roots, to take the place of vegetables, and then a pinch or two of salt found in the crevices of the rocks gave seasoning to the mixture.

"It must skim itself," exclaimed Tartlet, who seemed highly satisfied at his performance.

And off they started for Dream Bay by the shortest road. The box had not been disturbed. Godfrey opened it with care. Amid a storm of admiring exclamations from Tartlet, he began to pick out the things.

In this first journey Godfrey and his companion, transformed into beasts of burden, carried away to Will Tree the arms, the ammunition, and a part of the wearing apparel.

Then they rested from their fatigue beside the table, on which there smoked the stewed goat, which they pronounced most excellent. As for the meat, to listen to the Professor it would have been difficult even to imagine anything more exquisite! Oh! the marvelous effect of privation!

On the 30th, the next day, Godfrey and Tartlet set forth at dawn, and in three other journeys succeeded in emptying and carrying away all that the box contained. Before the evening, tools, weapons, instruments, utensils, were all brought, arranged, and stowed away in Will Tree.

On the 1st of August, the box itself, dragged along the beach not without difficulty, found a place in the tree, and was transformed into a linen-closet.

Tartlet, with the fickleness of his mind, now looked upon the future through none but rosy glasses. We can hardly feel astonished then that on this day, with his kit in his hand, he went out to find his pupil, and said to him in all seriousness, as if he were in the drawing-room of Kolderup's mansion, "Well, Godfrey, my boy, don't you think it is time to resume our dancing lessons?"

CHAPTER XIV
A CHANCE OF RESCUE

AND now the future looked less gloomy. But if Tartlet saw in the possession of the instruments, the tools, and the weapons only the means of making their life of isolation a little more agreeable, Godfrey was already thinking of how to escape from Phina Island. Could he not now construct a vessel strong enough to enable them to reach if not some neighboring land, at least some ship passing within sight of the island?

Meanwhile the weeks which followed were principally spent in carrying out not these ideas, but those of Tartlet. The wardrobe at Will Tree was now replenished, but it was decided to use it with all the discretion which the uncertainty of the future required. Never to wear any of the clothes unless necessity compelled him to do so, was the rule to which the professor was forced to submit.

"What is the good of that?" grumbled he. "It is a great deal too stingy, my dear Godfrey! Are we savages, that we should go about half naked?"

"I beg your pardon, Tartlet," replied Godfrey; "we are savages, and nothing else."

"As you please; but you will see that we shall leave the island before we have worn the clothes!"

"I know nothing about it, Tartlet, and it is better to have than to want."

"But on Sunday now, surely on Sunday, we might dress up a little?"

"Very well, on Sundays, then, and perhaps on public holidays," answered Godfrey, who did not wish to anger his frivolous companion; "but as today is Monday we shall have to wait a whole week before we come out in our best." We need hardly mention that from the moment he arrived on the island Godfrey had not omitted to mark each day as it passed. By the aid of the calendar he found in the box he was able to verify that the day was really Monday.

Each performed his daily task according to his ability. It was no longer necessary for them to keep watch by day and night over a fire which they had now the means of

relighting. Tartlet therefore abandoned, not without regret, a task which suited him so well. Henceforward he took charge of the provisioning with yam and camas roots—of that in short which formed the daily bread of the establishment, so that the professor went every day and collected them, up to the lines of shrubs with which the prairie was bordered behind Will Tree. It was one or two miles to walk, but he accustomed himself to it. Between whiles he occupied his time in collecting oysters or other mollusks, of which they consumed a great quantity.

Godfrey reserved for himself the care of the domestic animals and the poultry. The butchering trade was hardly to his taste, but he soon overcame his repugnance. Thanks to him, boiled meats appeared frequently on the table, followed by an occasional joint of roast meat to afford a sufficiently varied bill of fare. Game abounded in the woods of Phina Island, and Godfrey proposed to begin his shooting when other more pressing cares allowed him time. He thought of making good use of the guns, powder, and bullets in his arsenal, but he in the first place wished to complete his preparations. His tools enabled him to make several benches inside and outside Will Tree. The stools were cut out roughly with the axe, the table, made a little less roughly, became more worthy of the dishes and dinner things with which Professor Tartlet adorned it. The beds were arranged in wooden boxes and their litter of dry grass assumed a more inviting aspect. If mattresses and palliasses were still wanting, counterpanes at least were not. The various cooking utensils stood no longer on the ground, but had their places on planks fixed along the walls. Stores, linen, and clothes were carefully put away in cavities hollowed out in the bark of the sequoia. From strong pegs were suspended the arms and instruments, forming quite a trophy on the walls.

Godfrey was also desirous of putting a door to the house, so that the other living creatures—the domestic animals—should not come during the night and trouble their sleep. As he could not cut out boards with his only saw, the handsaw, he used large and thick pieces of bark, which he got off very easily. With these he made a door sufficiently massive to close the opening into Will Tree, at

the same time he made two little windows, one opposite to the other, so as to let light and air into the room. Shutters allowed him to close them at night, but from the morning to the evening it was no longer necessary to take refuge in flaring resinous torches which filled the dwelling with smoke. What Godfrey would think of to yield them light during the long nights of winter he had as yet no idea. He might take to making candles with the mutton fat, or he might be contented with resinous torches more carefully prepared.

Another of his anxieties was how to construct a chimney in Will Tree. While the fine weather lasted, the fire outside among the roots of the sequoia sufficed for all the wants of the kitchen, but when the bad weather came and the rain fell in torrents, and they would have to battle with the cold, whose extreme rigor during a certain time they reasonably feared, they would have to have a fire inside their house, and the smoke from it must have some vent. This important question therefore had to be settled.

One very useful work which Godfrey undertook was to put both banks of the river in communication with each other on the skirt of the sequoia trees.

He managed, after some difficulty, to drive a few stakes into the river-bed, and on them he fixed a staging of planks, which served for a bridge. They could thus get away to the northern shore without crossing the ford, which led them a couple of miles out of their road.

But if Godfrey took all these precautions so as to make existence a little more possible on this lone isle of the Pacific, in case he and his companion were destined to live on it for some time, or perhaps live on it forever, he had no intention of neglecting in any way the chances of rescue.

Phina Island was not on the routes taken by the ships—that was only too evident. It offered no port of call, nor means of revictualing. There was nothing to encourage ships to take notice of it. At the same time it was not impossible that a war-ship or a merchant-vessel might come in sight. It was advisable therefore to find some way of attracting attention, and showing that the island was inhabited.

With this object Godfrey erected a flagstaff at the end

of the cape which ran out to the north, and for a flag he sacrificed a piece of one of the cloths found in the trunk. As he thought that the white color would only be visible in a strong light, he tried to stain his flag with the berries of a sort of shrub which grew at the foot of the dunes. He obtained a very vivid red, which he could not make indelible owing to his having no mordant, but he could easily redye the cloth when the wind or rain had faded it.

These varied employments occupied him up to the 15th of August. For many weeks the sky had been constantly clear, with the exception of two or three storms of extreme violence which had brought down a large quantity of water, to be greedily drank by the soil.

About this time Godfrey began his shooting expeditions. But if he was skilful enough in the use of the gun, he could not reckon on Tartlet, who had yet to fire his first shot. Many days of the week did Godfrey devote to the pursuit of fur and feather, which, without being abundant, were yet plentiful enough for the requirements of Will Tree. A few partridges, some of the red-legged variety, and a few snipes, came as a welcome variation of the bill of fare. Two or three antelopes fell to the prowess of the young stalker; and although he had had nothing to do with their capture, the professor gave them a no less welcome than he did when they appeared as haunches and cutlets.

While he was out shooting, Godfrey did not forget to take a more complete survey of the island. He penetrated the depths of the dense forests which occupied the central districts. He ascended the river to its source. He again mounted the summit of the cone, and redescended by the talus on the eastern shore, which he had not, up to then, visited.

"After all these explorations," repeated Godfrey to himself, "there can be no doubt that Phina Island has no dangerous animals, neither wild beasts, snakes, nor saurians! I have not caught sight of one! Assuredly if there had been any, the report of the gun would have waked them! It is fortunate, indeed. If it were to become necessary to fortify Will Tree against their attacks, I do not know how we should get on!"

"It must also be concluded," continued he, "that the island is not inhabited at all. Either natives or people shipwrecked here would have appeared before now at the sound of the gun! There is, however, that inexplicable smoke which I twice thought I saw."

The fact is, that Godfrey had never been able to trace any fire. As for the hot water springs to which he attributed the origin of the vapor he had noticed, Phina Island being in no way volcanic did not appear to contain any, and he had to content himself with thinking that he had twice been the victim of an illusion.

Besides, this apparition of the smoke or the vapor was not repeated. When Godfrey the second time ascended the central cone, as also when he again climbed up into Will Tree, he saw nothing to attract his attention. He ended by forgetting the circumstance altogether.

Many weeks passed in different occupations about the tree, and many shooting excursions were undertaken. With every day their mode of life improved.

Every Sunday, as had been agreed, Tartlet donned his best clothes. On that day he did nothing but walk about under the big trees, and indulge in an occasional tune on the kit. Many were the glissades he performed, giving lessons to himself, as his pupil had positively refused to continue his course.

"What is the good of it?" was Godfrey's answer to the entreaties of the professor. "Can you imagine Robinson Crusoe taking lessons in dancing and deportment?"

"And why not?" asked Tartlet seriously. "Why should Robinson Crusoe dispense with deportment? Not for the good of others, but of himself, he should acquire refined manners."

To this Godfrey made no reply. And as he never came for his lesson, the professor became professor "emeritus."

The 13th of September was noted for one of the greatest and cruelest deceptions to which, on a desert island, the unfortunate survivors of a shipwreck could be subjected. Godfrey had never again seen that inexplicable and undiscoverable smoke on the island; but on this day, about three o'clock in the afternoon, his attention was at-

tracted by a long line of vapor, about the origin of which he could not be deceived.

He had gone for a walk to the end of Flag Point—the name of which he had given to the cape on which he had erected his flagstaff. While he was looking through his glass he saw above the horizon a smoke driven by the west wind toward the island.

Godfrey's heart beat high. "A ship!" he exclaimed.

But would this ship, this steamer, pass in sight of Phina Island? And if it passed, would it come near enough for the signal thereon to be seen on board? Or would not rather the semi-visible smoke disappear with the vessel toward the north-west or south-west of the horizon?

For two hours Godfrey was a prey to alternating emotions more easy to indicate than to describe. The smoke got bigger and bigger. It increased when the steamer restoked her fires, and diminished almost to vanishing point as the fuel was consumed. Continually did the vessel visibly approach. About four o'clock her hull had come up on the line between the sky and the sea.

She was a large steamer, bearing north-east. Godfrey easily made that out. If that direction was maintained, she would inevitably approach Phina Island.

Godfrey had at first thought of running back to Will Tree to inform Tartlet. What was the use of doing so? The sight of one man making signals could do as much good as that of two. He remained there, his glass at his eye, losing not a single movement of the ship.

The steamer kept on her course toward the coast, her bow steered straight for the cape. By five o'clock the horizon-line was already above her hull, and her rig was visible. Godfrey could even recognize the colors at her gaff. She carried the United States' ensign.

"But if I can see their flag, cannot they see mine? The wind keeps it out, so that they could easily see my flag with their glasses. Shall I make signals, by raising it and lowering it a few times, so as to show that I want to enter into communication with them? Yes! I have not an instant to lose."

It was a good idea. Godfrey ran to the end of Flag Point, and began to haul his flag up and down, as if he were saluting. Then he left it half-mast high, so as to

show, in the way usual with seafaring people, that he required help and succor.

The steamer still approached to within three miles of the shore, but her flag remained immovable at the peak, and replied not to that on Flag Point. Godfrey felt his heart sink. He would not be noticed! It was half-past six, and the sun was about to set!

The steamer was now about two miles from the cape, which she was rapidly nearing. At this moment the sun disappeared below the horizon. With the first shadows of night, all hope of being seen had to be given up. Godfrey again, with no more success, began to raise and lower his flag. There was no reply.

He then fired his gun two or three times, but the distance was still great, and the wind did not set in that direction! No report would be heard on board! The night gradually came on; soon the steamer's hull grew invisible. Doubtless in another hour she would have passed Phina Island.

Godfrey, not knowing what to do, thought of setting fire to a group of resinous trees which grew at the back of Flag Point. He lighted a heap of dry leaves with some gunpowder, and then set light to the group of pines, which flared up like an enormous torch.

But no fire on the ship answered to the one on the land, and Godfrey returned sadly to Will Tree, feeling perhaps more desolate than he had ever felt till then.

CHAPTER XV

VISITORS ON THE ISLAND

To Godfrey the blow was serious. Would this unexpected chance which had just escaped him ever offer again? Could he hope so? No! The indifference of the steamer as she passed in sight of the island, without even taking a look at it, was obviously shared in by all the vessels venturing in this deserted portion of the Pacific. Why should they put into port more than she had done? The island did not possess a single harbor.

Godfrey passed a sorrowful night. Every now and then jumping up as if he heard a cannon out at sea, he would

ask himself if the steamer had not caught sight of the huge fire which still burned on the coast, and if she were not endeavoring to answer the signal by a gunshot?

Godfrey listened. It was only an illusion of his over-excited brain. When the day came, he had almost come to look upon the apparition of the ship as but a dream, which had commenced about three o'clock on the previous afternoon. But no! He was only too certain that a ship had been in sight of Phina Island, maybe within two miles of it, and certainly she had not put in.

Of this deception Godfrey said not a word to Tartlet. What was the good of talking about it? Besides, his frivolous mind could not see more than twenty-four hours ahead. He was no longer thinking of the chances of escaping from the island which might offer. He no longer imagined that the future had great things in store for them. San Francisco was fading out of his recollection. He had no sweetheart waiting for him, no Uncle Will to return to. If at this end of the world he could only commence a course of lessons on dancing, his happiness would be complete—were it only with one pupil.

If the professor dreamed not of immediate danger, such as to compromise his safety in this island—bare, as it was, of wild beasts and savages—he was wrong. This very day his optimism was to be put to a rude test.

About four o'clock in the afternoon Tartlet had gone, according to his custom, to collect some oysters and mussels, on that part of the shore behind Flag Point, when Godfrey saw him coming back as fast as his legs could carry him to Will Tree. His hair stood on end around his temples. He looked like a man in flight, who dared not turn his head to the right or to the left.

"What is the matter?" shouted Godfrey, not without alarm, running to meet his companion.

"There! there!" answered Tartlet, pointing with his finger toward the narrow strip of sea visible to the north between the trees.

"But what is it?" asked Godfrey, whose first movement was to run to the edge of the sequoias.

"A canoe!"

"A canoe?"

"Yes! Savages! Quite a fleet of savages! Cannibals, perhaps!"

Godfrey looked in the direction pointed out. It was not a fleet, as the distracted Tartlet had said; but he was only mistaken about the quantity. In fact, there was a small vessel gliding through the water, now very calm, about half a mile from the coast, so as to double Flag Point.

"And why should they be cannibals?" asked Godfrey, turning toward the professor.

"Because in Crusoe Islands," answered Tartlet, "there are always cannibals, who arrive sooner or later."

"Is it not a boat from some merchant-ship?"

"From a ship?"

"Yes. From a steamer which passed here yesterday afternoon, in sight of our island."

"And you said nothing to me about it!" exclaimed Tartlet, lifting his hands to the sky.

"What good should I have done?" asked Godfrey. "Besides, I thought that the vessel had disappeared! But that boat might belong to her! Let us go and see!"

Godfrey ran rapidly back to Will Tree, and, seizing his glass, returned to the edge of the trees. He then examined with extreme attention the little vessel, which would ere then have perceived the flag on Flag Point as it fluttered in the breeze.

The glass fell from his hands. "Savages! Yes! They are really savages!" he exclaimed.

Tartlet felt his knees knock together, and a tremor of fright ran through his body.

It was a vessel manned by savages which Godfrey saw approaching the island. Built like a Polynesian canoe, she carried a large sail of woven bamboo; an outrigger on the weather side kept her from capsizing as she heeled down to the wind.

Godfrey easily distinguished the build of the vessel. She was a proa, and this would indicate that Phina Island was not far from Malaysia. But they were not Malays on board; they were half-naked blacks, and there were about a dozen of them.

The danger of being found was thus great. Godfrey regretted that he had hoisted the flag, which had not been

seen by the ship, but would be by these black fellows. To take it down now would be too late. It was, in truth, very unfortunate. The savages had probably come to the island thinking it was uninhabited, as indeed it had been before the wreck of the *Dream*. But there was the flag, indicating the presence of human beings on the coast! How were they to escape them if they landed?

Godfrey knew not what to do. Anyhow his immediate care must be to watch if they set foot on the island. He could think of other things afterward. With his glass at his eye he followed the proa; he saw it turn the point of the promontory, then run along the shore and then approach the mouth of the small stream, which, two miles up, flowed past Will Tree.

If the savages intended to paddle up the river, they would soon reach the group of sequoias—and nothing could hinder them. Godfrey and Tartlet ran rapidly back to their dwelling. They first of all set about guarding themselves against surprise, and giving themselves time to prepare their defense.

At least that is what Godfrey thought of. The idea of the professor took quite a different turn. "Ah!" he exclaimed. "It is destiny! This is as it was written! We could not escape it! You cannot be a Crusoe without a canoe coming to your island, without cannibals appearing one day or another! Here we have been for only three months, and there they are already! Assuredly, neither Defoe nor De Wyss exaggerated matters! You can make yourself a Crusoe, if you like!"

The precautions taken by Godfrey as soon as he returned to Will Tree were as follows. The fire burning among the roots of the sequoia was extinguished, and the embers scattered broadcast, so as to leave no trace; cocks, hens, and chickens were already in their house for the night, and the entrance was hidden with shrubs and twigs as much as possible; the other animals, the goats, agouties, and sheep, were driven on to the prairie, but it was unlucky that there was no stable to shut them up in; all the instruments and tools were taken into the tree. Nothing was left outside that could indicate the presence or the passage of human beings. Then the door was closely shut, after Godfrey and Tartlet had gone in. The door

made of the sequoia bark was indistinguishable from the bark of the trunk, and might perhaps escape the eyes of the savages, who would not look at it very closely. It was the same with the two windows, in which the lower boards were shut. Then all light was extinguished in the dwelling, and our friends remained in total darkness. How long that night was! Godfrey and Tartlet heard the slightest sounds outside. The creaking of a dry branch, even a puff of wind, made them start. They thought they heard some one walking under the trees. It seemed that they were prowling around Will Tree. Then Godfrey climbed up to one of the windows, opened one of the boards, and anxiously peered into the gloom.

Nothing!

However, Godfrey at last heard footsteps on the ground. His ear could not deceive him this time. He still looked, but could only see one of the goats come for shelter beneath the trees.

Had any of the savages happened to discover the house hidden in the enormous sequoia, Godfrey had made up his mind what to do. He would drag up Tartlet with him by the chimney inside, and take refuge in the higher branches, where he would be better able to resist. With guns and revolvers in his possession, and ammunition in abundance, he would there have some chance against a dozen savages devoid of fire-arms.

If in the event of their being armed with bows and arrows they attacked from below, it was not likely that they would have the best of it against fire-arms aimed from above. If on the other hand they forced the door of the dwelling and tried to reach the branches from the inside, they would find it very difficult to get there, owing to the narrow opening, which the besieged could easily defend.

Godfrey said nothing about this to Tartlet. The poor man had been almost out of his mind with fright since he had seen the proa. The thought that he might be obliged to take refuge in the upper part of a tree, as if in an eagle's nest, would not have soothed him in the least. If it became necessary, Godfrey decided to drag him up before he had time to think about it.

The night passed amid these alternations of fear and

hope. No attack occurred. The savages had not yet come to the sequoia group. Perhaps they would wait for the day before venturing to cross the island.

"That is probably what they will do," said Godfrey, "since our flag shows that it is inhabited! But there are only a dozen of them, and they will have to be cautious! How are they to know that they have only to deal with a couple of shipwrecked men? No! they will risk nothing except by daylight—at least, if they are going to stop."

"Supposing they go away when the daylight comes?" answered Tartlet.

"Go away? Why should they have come to Phina Island for one night?"

"I do not know," replied the professor, who in his terror could only explain the arrival of the blacks by supposing that they had come to feed on human flesh.

"Anyhow," continued Godfrey, "tomorrow morning, if they have not come to Will Tree, we will go out and reconnoiter."

"We?"

"Yes! we! Nothing would be more imprudent than for us to separate! Who knows whether we may not have to run to the forest in the center of the island and hide there for some days—until the departure of the proa! No! We will keep together, Tartlet!"

"Hush!" said the professor in a low voice; "I think I hear something outside."

Godfrey climbed up again to the window, and got down again almost immediately. "No!" he said. "Nothing suspicious! It is only our cattle coming back to the wood."

"Hunted perhaps!" exclaimed Tartlet.

"They seem very quiet, then," replied Godfrey; "I fancy they have only come in search of shelter against the morning dew."

"Ah!" murmured Tartlet in so piteous a tone that Godfrey could hardly help laughing, "these things could not happen at your uncle's place in Montgomery Street!"

"Day will soon break," said Godfrey, after a pause. "In an hour's time, if the savages have not appeared, we will leave Will Tree and reconnoiter toward the north of the island. You are able to carry a gun, Tartlet?"

"Carry? Yes!"

"And to fire it in a stated direction?"

"I do not know! I have never tried such a thing, and you may be sure, Godfrey, that my bullet will not go—"

"Who knows if the report alone might not frighten the savages?"

An hour later, it was light enough to see beyond the sequoias. Godfrey then cautiously reopened the shutters.

From that looking to the south he saw nothing extraordinary. The domestic animals wandered peacefully under the trees, and did not appear in the least alarmed. The survey completed, Godfrey carefully shut this window. Through the opening to the north there was a view up to the shore. Two miles off even the end of Flag Point could be seen; but the mouth of the river at the place where the savages had landed the evening before was not visible. Godfrey at first looked around without using his glass, so as to examine the environs of Will Tree on this side of Phina Island. All was quite peaceful.

Godfrey, then taking his glass, swept around the coast to the promontory at Flag Point. Perhaps, as Tartlet had said, though it was difficult to find the reason, the savages had embarked, after a night spent on shore, without attempting to see if the island were inhabited.

CHAPTER XVI

CRUSOE'S MAN FRIDAY

BUT Godfrey suddenly uttered an exclamation which made the professor jump. There could be no doubt that the savages knew the island was inhabited, for the flag hitherto hoisted at the extremity of the cape had been carried away by them, and no longer floated on the mast at Flag Point. The moment had then come to put the project into execution, to reconnoiter if the savages were still on the island, and see what they were doing.

"Let us go," said he to his companion.

"Go! But—" answered Tartlet.

"Would you rather stay here?"

"With you, Godfrey—yes!"

"No—alone!"

"Alone! Never!"

"Come along, then!"

Tartlet, thoroughly understanding that Godfrey would not alter his decision, resolved to accompany him. He had not courage enough to stay behind at Will Tree.

Before starting, Godfrey assured himself that the fire-arms were ready for action. The two guns were loaded, and one passed into the hands of the professor, who seemed as much embarrassed with it as might have been a savage of Pomotou. He also hung one of the hunting-knives to his belt, to which he had already attached his cartridge-pouch. The thought had occurred to him to also take his fiddle, imagining perhaps that they would be sensible to the charm of its squeaking, of which all the talent of a virtuoso could not conceal the harshness. Godfrey had some trouble in getting him to abandon this idea.

It was now six o'clock in the morning. The summits of the sequoias were glowing in the first rays of the sun. Godfrey opened the door; he stepped outside; he scanned the group of trees. Complete solitude. The animals had returned to the prairie. There they were, tranquilly browsing, about a quarter of a mile away. Nothing about them denoted the least uneasiness.

Godfrey made a sign to Tartlet to join him. The professor, as clumsy as could be in his fighting harness, followed—not without some hesitation. Then Godfrey shut the door, and saw that it was well hidden in the bark of the sequoia. Then, having thrown at the foot of the tree a bundle of twigs, which he weighted with a few large stones, he set out toward the river, whose banks he intended to descend, if necessary, to its mouth. Tartlet followed him, not without giving before each of his steps an uneasy stare completely around him up to the very limits of the horizon; but the fear of being left alone impelled him to advance.

Arrived at the edge of the group of trees, Godfrey stopped. Taking his glasses from their case, he scanned with extreme attention all that part of the coast between the Flag Point promontory and the north-east angle of the island. Not a living being showed itself, not a single smoke wreath was rising in the air.

The end of the cape was equally deserted, but they would there doubtless find numberless footprints, freshly

made. As for the mast, Godfrey had not been deceived. If the staff still rose above the last rock on the cape, it was bereft of its flag. Evidently the savages after coming to the place had gone off with the red cloth which had excited their covetousness, and had regained their boat at the mouth of the river.

Godfrey then turned off so as to examine the western shore. It was nothing but a vast desert from Flag Point right away beyond the curve of Dream Bay. No boat of any kind appeared on the surface of the sea. If the savages had taken to their proa, it only could be concluded that they were hugging the coast sheltered by the rocks, and so closely that they could not be seen.

However, Godfrey could not and would not remain in doubt. He was determined to ascertain, yes or no, if the proa had definitely left the island. To do this it was necessary to visit the spot where the savages had landed the night before, that is to say, the narrow creek at the mouth of the river. This he immediately attempted.

The borders of the small watercourse were shaded by occasional clumps of trees encircled by shrubs, for a distance of about two miles. Beyond that for some five or six hundred yards down to the sea the river ran between naked banks. This state of affairs enabled him to approach close to the landing-place without being perceived. It might be, however, that the savages had ascended the stream, and to be prepared for this eventuality the advance had to be made with extreme caution.

Godfrey, however, thought, not without reason, that, at this early hour the savages, fatigued by their long voyage, would not have quitted their anchorage. Perhaps they were still sleeping either in their canoe or on land, in which case it would be seen if they could not be surprised.

This idea was acted upon at once. It was important that they should get on quickly. In such circumstances the advantage is generally gained at the outset. The fire-arms were again examined, the revolvers were carefully looked at, and then Godfrey and Tartlet commenced the descent of the left bank of the river in Indian file. All around was quiet. Flocks of birds flew from one bank to the other, pursuing each other among the higher branches without showing any uneasiness.

Godfrey went first, but it can easily be believed that his companion found the attempt to cover step rather tiring. Moving from one tree to another they advanced toward the shore without risk of discovery. Here the clumps of bushes hid them from the opposite bank, there even their heads disappeared amid the luxurious vegetation. But no matter where they were, an arrow from a bow or a stone from a sling might at any moment reach them. And so they had to be constantly on their guard.

However, in spite of the recommendations which were addressed to him, Tartlet, tripping against an occasional stump, had two or three falls which might have complicated matters. Godfrey was beginning to regret having brought such a clumsy assistant. Indeed, the poor man could not be much help to him. Doubtless he would have been worth more left behind at Will Tree; or, if he would not consent to that, hidden away in some nook in the forest. But it was too late. An hour after he had left the sequoia group, Godfrey and his companion had come a mile—only a mile—for the path was not easy beneath the high vegetation and between the luxuriant shrubs. Neither one nor the other of our friends had seen anything suspicious.

Hereabout the trees thinned out for about a hundred yards or less, the river ran between naked banks, the country around was barer. Godfrey stopped. He carefully observed the prairie to the right and left of the stream.

Still there was nothing to disquiet him, nothing to indicate the approach of savages. It is true that as they could not but believe the island inhabited, they would not advance without precaution, in fact they would be as careful in ascending the little river as Godfrey was in descending it. It was to be supposed therefore that if they were prowling about the neighborhood, they would also profit by the shelter of the trees or the high bushes of mastics and myrtles which formed such an excellent screen.

It was a curious though very natural circumstance that, the farther they advanced, Tartlet, perceiving no enemy, little by little lost his terror, and began to speak with scorn of "those cannibal laughing-stocks." Godfrey, on the contrary, became more anxious, and it was with greater precaution than ever that he crossed the open

space and regained the shadow of the trees. Another hour led them to the place where the banks, beginning to feel the effects of the sea's vicinity, were only bordered with stunted shrubs, or sparse grasses.

Under these circumstances it was difficult to keep hidden or rather impossible to proceed without crawling along the ground. This is what Godfrey did, and also what he advised Tartlet to do. "There are not any savages! There are not any cannibals! They have all gone!" said the professor.

"There are!" answered Godfrey quickly, in a low voice. "They ought to be here! Down, Tartlet, get down! Be ready to fire, but don't do so till I tell you."

Godfrey said these words in such a tone of authority that the professor, feeling his limbs give way under him, had no difficulty in at once assuming the required position. And he did well!

It was not without reason that Godfrey had spoken as he had. From the spot which they then occupied, they could see neither the shore, nor the place where the river entered the sea. A small spur of hills shut out the view about a hundred yards ahead, but above this near horizon a dense smoke was rising straight in the air.

Godfrey, stretched at full length in the grass, with his finger on the trigger of his musket, kept looking toward the coast. "This smoke," he said, "is it not of the same kind that I have already seen twice before? Should I conclude that savages have previously landed on the north and south of the island, and that the smoke came from fires lighted by them? But no! That is not possible, for I found no cinders, nor traces of a fireplace, nor embers! Ah! this time I'll know the reason of it." And by a clever reptilian movement, which Tartlet imitated as well as he could, he managed, without showing his head above the grass, to reach the bend of the river. Thence he could command, at his ease, every part of the bank through which the river ran.

An exclamation could not but escape him! His hand touched the professor's shoulder to prevent any movement of his! Useless to go further! Godfrey saw what he had come to see!

A large fire of wood was lighted on the beach, among

the lower rocks, and from it a canopy of smoke rose slowly to the sky. Around the fire, feeding it with fresh armfuls of wood, of which they had made a heap, went and came the savages who had landed the evening before. Their canoe was moored to a large stone, and, lifted by the rising tide, oscillated on the ripples of the shore.

Godfrey could distinguish all that was passing on the sands without using his glasses. He was not more than two hundred yards from the fire, and he could even hear it crackling. He immediately perceived that he need fear no surprise from the rear, for all the blacks he had counted in the proa were in the group.

Ten out of the twelve were occupied in looking after the fire and sticking stakes in the ground with the evident intention of rigging up a spit in the Polynesian manner. An eleventh, who appeared to be the chief, was walking along the beach, and constantly turning his glances toward the interior of the island, as if he were afraid of an attack. Godfrey recognized as a piece of finery on his shoulders the red stuff of his flag.

The twelfth savage was stretched on the ground, tied tightly to a post. Godfrey recognized at once the fate in store for the wretched man. The spit was for him! The fire was to roast him at! Tartlet had not been mistaken when, the previous evening, he had spoken of these folks as cannibals!

It must be admitted that neither was he mistaken in saying that the adventures of Crusoes, real or imaginary, were all copied one from the other! Most certainly Godfrey and he did then find themselves in the same position as the hero of Daniel Defoe when the savages landed on his island. They were to assist, without doubt, at the same scene of cannibalism.

Godfrey decided to act as this hero did! He would not permit the massacre of the prisoner for which the stomachs of the cannibals were waiting! He was well armed. His two muskets—four shots—his two revolvers —a dozen shots—could easily settle these eleven rascals, whom the mere report of one of the fire-arms might perhaps be sufficient to scatter. Having taken his decision he coolly waited for the moment to interfere like a thunderclap.

He had not long to wait! Twenty minutes had barely elapsed, when the chief approached the fire. Then by a gesture he pointed out the prisoner to the savages who were expecting his orders.

Godfrey arose. Tartlet, without knowing why, followed the example. He did not even comprehend where his companion was going, for he had said nothing to him of his plans.

Godfrey imagined, evidently, that at sight of him the savages would make some movement, perhaps to rush to their boat, perhaps to rush at him. They did nothing. It did not even seem as though they saw him; but at this moment the chief made a significant gesture. Three of his companions went toward the prisoner, unloosed him, and forced him near the fire.

He was still a young man, who, feeling that his last hour had come, resisted with all his might. Assuredly, if he could, he would sell his life dearly. He began by throwing off the savages who held him, but he was soon knocked down, and the chief, seizing a sort of stone axe, jumped forward to beat in his head.

Godfrey uttered a cry, followed by a report. A bullet whistled through the air, and it seemed as though the chief were mortally wounded, for he fell on the ground.

At the report, the savages, surprised as though they had never heard the sound of fire-arms, stopped. At the sight of Godfrey those who held the prisoner instantly released him. Immediately the poor fellow arose, and ran toward the place where he perceived his unexpected liberator.

At this moment a second report was heard. It was Tartlet, who, without looking—for the excellent man kept his eyes shut—had just fired, and the stock of the musket on his right shoulder delivered the hardest knock which had ever been received by the professor of dancing and deportment. But—what a chance it was!—a second savage fell close to his chief.

The rout at once began. Perhaps the savages thought they had to do with a numerous troop of natives whom they could not resist. Perhaps they were simply terrified at the sight of the two white men who seemed to keep the lightning in their pockets. There they were, seizing the two who were wounded, carrying them off, rushing

to the proa, driving it by their paddles out of the little creek, hoisting their sail, steering before the wind, making for the Flag Point promontory, and doubling it in hot haste.

Godfrey had no thought of pursuing them. What was the good of killing them? They had saved the victim. They had put them to flight, that was the important point. This had been done in such a way that the cannibals would never dare to return to Phina Island.

All was then for the best. They had only to rejoice in their victory, in which Tartlet did not hesitate to claim the greatest share.

Meanwhile the prisoner had come to his rescuer. For an instant he stopped, with the fear inspired in him by superior beings, but almost immediately he resumed his course. When he arrived before the two whites, he bowed to the ground; then catching hold of Godfrey's foot, he placed it on his head in sign of servitude.

One would almost have thought that this Polynesian savage had also read Robinson Crusoe!

CHAPTER XVII

NEW ANIMALS APPEAR

GODFREY at once raised the poor fellow, who lay prostrate before him. He looked in his face.

He was a man of thirty-five or more, wearing only a rag around his loins. In his features, as in the shape of his head, there could be recognized the type of the African negro. It was not possible to confound him with the debased wretches of the Polynesian islands, who, with their depressed crania and elongated arms, approach so strangely to the monkey.

Now, as he was a negro from Soudan or Abyssinia who had fallen into the hands of the natives of an archipelago of the Pacific, it might be that he could speak English or one or two words of the European languages which Godfrey understood. But it was soon apparent that the unhappy man only used an idiom that was absolutely incomprehensible—probably the language of the aborigines among whom he had doubtless arrived when very young.

In fact, Godfrey had immediately interrogated him in English, and had obtained no reply. He then made him understand by signs, not without difficulty, that he would like to know his name.

After many fruitless essays, the negro, who had a very intelligent and even honest face, replied to the demand which was made of him in a single word—

"Carefinotu."

"Carefinotu!" exclaimed Tartlet. "Do you hear the name? I propose that we call him 'Wednesday,' for to-day is Wednesday, and that is what they always do in these Crusoe islands! Is he to be allowed to call himself Carefinotu?"

"If that is his name," said Godfrey, "why should he not keep it?"

And at the moment he felt a hand placed on his chest, while all the black's physiognomy seemed to ask him what his name was.

"Godfrey!" answered he.

The black endeavored to say the word, but although Godfrey repeated it several times, he could not succeed in pronouncing it in an intelligible fashion. Then he turned toward the professor, as if to know his name.

"Tartlet," was the reply of that individual in a most amiable tone.

"Tartlet!" repeated Carefinotu.

And it seemed as though this assemblage of syllables was more agreeable to his vocal chords, for he pronounced it distinctly. The professor appeared to be extremely flattered. In truth he had reason to be.

Then Godfrey, wishing to put the intelligence of the black to some profit, tried to make him understand that he wished to know the name of the island. He pointed with his hand to the woods and prairies and hills, and then the shore which bound them, and then the horizon of the sea, and he interrogated him with a look.

Carefinotu did not at first understand what was meant, and imitating the gesture of Godfrey he also turned and ran his eyes over the space. "Arneka," said he at length.

"Arneka?" replied Godfrey, striking the soil with his foot so as to accentuate his demand.

"Arneka!" repeated the negro.

This told Godfrey nothing, neither the geographical name borne by the island, nor its position in the Pacific. He could not remember such a name; it was probably a native one, little known to geographers.

However, Carefinotu did not cease from looking at the two white men, not without some stupor, going from one to the other as if he wished to fix in his mind the differences which characterized them. The smile on his mouth disclosed abundant teeth of magnificent whiteness which Tartlet did not examine without a certain reserve.

"If those teeth," he said, "have never eaten human flesh may my fiddle burst up in my hand."

"Anyhow, Tartlet," answered Godfrey; "our new companion no longer looks like the poor beggar they were going to cook and feed on! That is the main point!"

What particularly attracted the attention of Carefinotu were the weapons carried by Godfrey and Tartlet—as much the musket in the hand as the revolver in the belt.

Godfrey easily understood this sentiment of curiosity. It was evident that the savage had never seen a fire-arm. He said to himself that this was one of those iron tubes which had launched the thunderbolt that had delivered him. There could be no doubt of it.

Godfrey, wishing to give him, not without reason, a high idea of the power of the whites, loaded his gun, and then, showing to Carefinotu a red-legged partridge that was flying across the prairie about a hundred yards away, he shouldered it quickly, and fired. The bird fell.

At the report the black gave a prodigious leap, which Tartlet could not but admire from a choregraphic point of view. Then repressing his fear, and seeing the bird with broken wing running through the grass, he started off and swift as a greyhound ran toward it, and with many a caper, half of joy, half of stupefaction, brought it back to his master.

Tartlet then thought of displaying to Carefinotu that the Great Spirit had also favored him with the power of the lightning; and perceiving a kingfisher tranquilly seated on an old stump near the river was bringing the stock up to his cheek, when Godfrey stopped him with, "No! Don't fire, Tartlet!"

"Why not?"

"Suppose that by some mishap you were not to hit the bird, think how we would fall in the estimation of the negro!"

"And why should I not hit him?" replied Tartlet with some acerbity. "Did I not, during the battle, at more than a hundred paces, the very first time I handled a gun, hit one of the cannibals full in the chest?"

"You touched him evidently," said Godfrey; "for he fell. But take my advice, Tartlet, and in the common interest do not tempt fortune twice!"

The professor, slightly annoyed, allowed himself to be convinced; he threw the gun on his shoulder with a swagger, and both our heroes, followed by Carefinotu, returned to Will Tree.

There the new guest of Phina Island met with quite a surprise in the habitation so happily contrived in the lower part of the sequoia. First he had to be shown, by using them while he looked on, the use of the tools, instruments, and utensils. It was obvious that Carefinotu belonged to, or had lived among savages in the lowest rank of the human scale, for fire itself seemed to be unknown to him. He could not understand why the pot did not take fire when they put it on the blazing wood; he would have hurried away from it, to the great displeasure of Tartlet, who was watching the different phases of the cooking of the soup. At a mirror, which was held out to him, he betrayed consummate astonishment; he turned around, and turned it around to see if he himself were not behind it.

"The fellow is hardly a monkey!" exclaimed the professor with a disdainful grimace.

"No, Tartlet," answered Godfrey; "he is more than a monkey, for his looks behind the mirror show good reasoning power."

"Well, I will admit that he is not a monkey," said Tartlet, shaking his head as if only half convinced; "but we shall see if such a thing can be of any good to us."

"I am sure he will be!" replied Godfrey.

In any case Carefinotu showed himself quite at home with the food placed before him. He first tore it apart, and then tasted it; and then I believe that the whole breakfast of which they partook—the agouti soup, the

partridge killed by Godfrey, and the shoulder of mutton with camas and yam roots—would hardly have sufficed to calm the hunger which devoured him.

"The poor fellow has a good appetite!" said Godfrey.

"Yes," responded Tartlet; "and we shall have to keep a watch on his cannibal instinct."

"Well, Tartlet! We shall make him get over the taste of human flesh if he ever had it!"

"I would not swear that," replied the professor. "It appears that once they have acquired this taste—"

While they were talking, Carefinotu was listening with extreme attention. His eyes sparkled with intelligence. One could see that he understood what was being said in his presence. He then spoke with extreme volubility, but it was only a succession of onomatopœias devoid of sense, of harsh interjections with *a* and *ou* predominant, as in the majority of Polynesian idioms.

Whatever the negro was, he was a new companion; he might become a devoted servant, which the most unexpected chance had sent to the hosts of Will Tree. He was powerful, adroit, active; no work came amiss to him. He showed a real aptitude to imitate what he saw being done. It was in this way that Godfrey proceeded with his education. The care of the domestic animals, the collection of the roots and fruits, the cutting up of the sheep or agouties, which were to serve for food for the day, the fabrication of a sort of cider they extracted from the wild manzanilla apples—he acquitted himself well in all these tasks, after having seen them done.

Whatever Tartlet thought, Godfrey felt no distrust in the savage, and never seemed to regret having come across him. What disquieted him was the possible return of the cannibals who now knew the situation of Phina Island.

From the first, a bed had been reserved for Carefinotu in the room at Will Tree, but generally, unless it was raining, he preferred to sleep outside in some hole in the tree, as though he were on guard over the house.

During the fortnight which followed his arrival on the island, Carefinotu many times accompanied Godfrey on his shooting excursions. His surprise was always extreme when he saw the game fall, hit at such a distance; but in his character of retriever, he showed a dash and daring

which no obstacles, hedge or bush, or stream, could stop.

Gradually, Godfrey became greatly attached to this negro. There was only one part of his progress in which Carefinotu showed refractoriness; that was in learning the English language. Do what he might, he could not be prevailed upon to pronounce the most ordinary words which Godfrey, and particularly Professor Tartlet, tried to teach him.

So the time passed. But if the present was fairly supportable, thanks to a happy accident, if no immediate danger menaced them, Godfrey could not help asking himself, if they were ever to leave this island, by what means they were to rejoin their country! Not a day passed but he thought of Uncle Will and his betrothed. It was not without secret apprehension that he saw the bad season approaching, which would put between his friends and him a barrier still more impassable.

On the 27th of September a circumstance occurred deserving of note. If it gave more work to Godfrey and his two companions, it at least assured them of an abundant reserve of food. Godfrey and Carefinotu were busied in collecting the mollusks, at the extreme end of Dream Bay, when they perceived out at sea an innumerable quantity of small moving islets which the rising tide was bringing gently to shore. It was a sort of floating archipelago, on the surface of which there walked, or flew, a few of those sea-birds, with great expanse of wing, known as sea-hawks.

What then were these masses which floated landward, rising and falling with the undulations of the waves? Godfrey did not know what to think, when Carefinotu threw himself down on his stomach, and then drawing his head back into his shoulders, folded beneath him his arms and legs, and began to imitate the movements of an animal crawling slowly along the ground.

Godfrey looked at him without understanding these extraordinary gymnastics. Then suddenly, "Turtles!" he exclaimed.

Carefinotu was right. There was quite a square mile of myriads of turtles, swimming on the surface of the water.

About a hundred fathoms from the shore the greater part of them dived and disappeared, and the sea-hawks,

finding their footing gone, flew up into the air in large spirals. But luckily about a hundred of the amphibians came on to the beach.

Godfrey and the negro had quickly run down in front of these creatures, each of which measured at the least from three to four feet in diameter. Now the only way of preventing turtles from regaining the sea is to turn them on their backs; and it was in this rough work that Godfrey and Carefinotu employed themselves, not without great fatigue.

The following days were spent in collecting the booty. The flesh of the turtle, which is excellent fresh or preserved, could perhaps be kept for a time in both forms. In preparation for the winter, Godfrey had the greater part salted in such a way as to serve for the needs of each day. For some time the table was supplied with turtle soup, on which Tartlet was not the only one to regale himself.

Barring this incident, the monotony of existence was in no way ruffled. Every day the same hours were devoted to the same work. Would not the life become still more depressing when the winter season would oblige Godfrey and his companions to shut themselves up in Will Tree? Godfrey could not think of it without anxiety. But what could he do?

Meanwhile, he continued the exploration of the island, and all the time not occupied with more pressing tasks he spent in roaming about with his gun. Generally Carefinotu accompanied him, Tartlet remaining behind at the dwelling. Decidedly he was no hunter, although his first shot had been a master-stroke!

On one of these occasions an unexpected incident happened, of a nature to gravely compromise the future safety of the inmates of Will Tree. Godfrey and the black had gone out hunting in the central forest, at the foot of the hill which formed the principal ridge of Phina Island. Since the morning they had seen nothing pass but two or three antelopes through the high underwood, but at too great a distance for them to fire with any chance of hitting them. As Godfrey was not in search of game for dinner, and did not seek to destroy for destruction's sake, he resigned himself to return empty-handed. If he re-

gretted doing so it was not so much for the meat of the antelope, as for the skin, of which he intended to make good use.

It was about three o'clock in the afternoon. He and his companion after lunch were no more fortunate than before. They were preparing to return to Will Tree for dinner, when, just as they cleared the edge of the wood, Carefinotu made a bound; then precipitating himself on Godfrey, he seized him by the shoulders, and dragged him along with such vigor that resistance was impossible.

After going about twenty yards they stopped. Godfrey took breath, and, turning toward Carefinotu, interrogated him with a look.

The black, exceedingly frightened, stretched out his hand toward an animal which was standing motionless about fifty yards off.

It was a grizzly bear, whose paws held the trunk of a tree, and who was swaying his big head up and down, as if he were going to rush at the two hunters.

Immediately, without pausing to think, Godfrey loaded his gun, and fired before Carefinotu could hinder him.

Was the enormous plantigrade hit by the bullet? Probably. Was he killed? They could not be sure, but his paws unclasped, and he rolled at the foot of the tree. Delay was dangerous. A struggle with so formidable an animal might have the worst results. In the forests of California the pursuit of the grizzly is fraught with the greatest danger, even to professional hunters of the beast.

And so the black seized Godfrey by the arms to drag him away in the direction of Will Tree, and Godfrey, understanding that he could not be too cautious, made no resistance.

CHAPTER XVIII

A DANGEROUS FOE

THE presence of a formidable wild beast in Phina Island was, it must be confessed, calculated to make our friends think the worst of the ill-fortune which had fallen on them.

Godfrey—perhaps he was wrong—did not consider that

he ought to hide from Tartlet what had passed. "A bear!" screamed the professor, looking around him with a bewildered glare as if the environs of Will Tree were being assailed by a herd of wild beasts. "Why, a bear? Up to now we had not a bear in our island! If there is one there may be many, and even numbers of other ferocious beasts—jaguars, panthers, tigers, hyænas, lions!"

Tartlet already beheld Phina Island given over to quite a menagerie escaped from their cages.

Godfrey answered that there was no need for him to exaggerate. He had seen one bear, that was certain. Why one of these animals had never been seen before in his wanderings on the island he could not explain, and it was indeed inexplicable. But to conclude from this that wild animals of all kinds were prowling in the woods and prairies was to go too far. Nevertheless, they would have to be cautious and never go out unarmed.

Unhappy Tartlet! From this day there commenced for him an existence of anxieties, emotions, alarms, and irrational terrors which gave him nostalgia for his native land in a most acute form. "No!" repeated he. "No! If there are animals—I have had enough of it, and I want to get off!"

Godfrey and his companions then had henceforth to be on their guard. An attack might take place not only on the shore side or the prairie side, but even in the group of sequoias. This is why serious measures were taken to put the habitation in a state to repel a sudden attack. The door was strengthened, so as to resist the clutches of a wild beast. As for the domestic animals Godfrey would have built a stable to shut them up in at least at night, but it was not easy to do so. He contented himself at present with making a sort of enclosure of branches not far from Will Tree, which would keep them as in a fold. But the enclosure was not solid enough nor high enough to hinder a bear or hyæna from upsetting it or getting over it.

Notwithstanding the remonstrances made to him, Carefinotu persisted in watching outside during the night, and Godfrey hoped thus to receive warning of a direct attack.

Decidedly Carefinotu endangered his life in thus constituting himself the guardian of Will Tree; but he had

understood that he could thus be of service to his liberators, and he persisted, in spite of all Godfrey said to him, in watching as usual over the general safety.

A week passed without any of these formidable visitors appearing in the neighborhood. Godfrey did not go very far from the dwelling, unless there was a necessity for his doing so. While the sheep and goats grazed on the neighboring prairie, they were never allowed out of sight. Generally Carefinotu acted as shepherd. He did not take a gun, for he did not seem to understand the management of fire-arms, but one of the hunting-knives hung from his belt, and he carried an axe in his right hand. Thus armed the active negro would not have hesitated to throw himself before a tiger or any animal of the worst description.

However, as neither a bear nor any of his congeners had appeared since the last encounter Godfrey began to gather confidence. He gradually resumed his hunting expeditions, but without pushing far into the interior of the island. Frequently the black accompanied him; Tartlet, safe in Will Tree, would not risk himself in the open, not even if he had the chance of giving a dancing lesson. Sometimes Godfrey would go alone, and then the professor had a companion to whose instruction he obstinately devoted himself.

Yes! Tartlet had at first thought of teaching Carefinotu the most ordinary words in the English language, but he had to give this up, as the negro seemed to lack the necessary phonetic apparatus for that kind of pronunciation. "Then," had Tartlet said, "if I cannot be his professor, I will be his pupil!"

And he it was who attempted to learn the idiom spoken by Carefinotu. Godfrey had warned him that the accomplishment would be of little use. Tartlet was not dissuaded. He tried to get Carefinotu to name the objects he pointed at with his hand. In truth Tartlet must have got on excellently, for at the end of fifteen days he actually knew fifteen words! He knew that Carefinotu said "birsi" for fire, "aradore" for the sky, "mervira" for the sea, "doura" for a tree, etc. He was as proud of this as if he had taken the first prize for Polynesian at some examination!

It was then with a feeling of gratitude that he wished

to make some recognition of what had been done for him, and instead of torturing the negro with English words, he resolved on teaching him deportment and the true principles of European choregraphy.

At this Godfrey could not restrain his peals of laughter. After all it would pass the time away, and on Sunday, when there was nothing else to do, he willingly assisted at the course of lectures delivered by the celebrated Professor Tartlet of San Francisco. Indeed, we ought to have seen them! The unhappy Carefinotu perspired profusely as he went through the elementary exercises. He was docile and willing, nevertheless; but like all his fellows, his shoulders did not set back, nor did his chest throw out, nor did his knees or his feet point apart! To make a Vestris or a Saint Leon of a savage of this sort!

The professor pursued his task in quite a fury. Carefinotu, tortured as he was, showed no lack of zeal. What he suffered, even to get his feet into the first position, can be imagined! And when he passed to the second and then to the third, it was still more agonizing.

"But look at me, you blockhead!" exclaimed Tartlet. who added example to precept. "Put your feet out! Further out! The heel of one to the heel of the other! Open your knees, you duffer! Put back your shoulders, you idiot! Stick up your head! Round your elbows!"

"But you ask what is impossible!" said Godfrey.

"Nothing is impossible to an intelligent man!" was Tartlet's invariable response.

"But his build won't allow of it."

"Well, his build must allow of it! He will have to do it sooner or later, for the savage must at least know how to present himself properly in a drawing-room!"

"But, Tartlet, he will never have the opportunity of appearing in a drawing-room!"

"Eh! How do you know that, Godfrey?" replied the professor, drawing himself up. "Do you know what the future may bring forth?"

This was the last word in all discussions with Tartlet. And then the professor taking his kit would with the bow extract from it some squeaky little air to the delight of Carefinotu. It required but this to excite him. Oblivious of choregraphic rules, what leaps, what contortions, what

capers! And Tartlet, in a reverie, as he saw this child of Polynesia so demean himself, inquired if these steps, perhaps a little too characteristic, were not natural to the human being, although outside all the principles of his art.

But we must leave the professor of dancing and deportment to his philosophical meditations, and return to questions at once more practical and pressing. During his last excursions into the plain, either by himself or with Carefinotu, Godfrey had seen no wild animal. He had even come upon no traces of such. The river to which they would come to drink bore no footprint on its banks. During the night there were no howlings nor suspicious noises. Besides the domestic animals continued to give no signs of uneasiness.

"This is singular," said Godfrey several times; "but I was not mistaken! Carefinotu certainly was not! It was really a bear that he showed me! It was really a bear that I shot! Supposing I killed him, was he the last representative of the plantigrades on the island?"

It was quite inexplicable! Besides, if Godfrey had killed this bear, he would have found the body where he had shot it. Now they searched for it in vain! Were they to believe then that the animal mortally wounded had died far off in some den? It was possible after all, but then at this place, at the foot of this tree, there would have been traces of blood, and there were none.

"Whatever it is," thought Godfrey, "it does not much matter; and we must keep on our guard."

With the first days of November it could be said that the wet season had commenced in this unknown latitude. Cold rains fell for many hours. Later on probably they would experience those interminable showers which do not cease for weeks at a time, and are characteristic of the rainy period of winter in these latitudes.

Godfrey had then to contrive a fireplace in the interior of Will Tree—an indispensable fireplace that would serve as well to warm the dwelling during the winter months as to cook their food in shelter from the rain and tempest.

The hearth could at any time be placed in a corner of the chamber between big stones, some placed on the ground, and others built up around them; but the question was how to get the smoke out, for to leave it to escape

by the long chimney, which ran down the center of the sequoia, proved impracticable.

Godfrey thought of using as a pipe some of those long stout bamboos which grew on certain parts of the river banks. It should be said that on this occasion he was greatly assisted by Carefinotu. The negro, not without effort, understood what Godfrey required. He it was who accompanied him for a couple of miles from Will Tree to select the larger bamboos; he it was who helped him build his hearth. The stones were placed on the ground opposite to the door; the bamboos, emptied of their pith and bored through at the knots, afforded, when joined one to another, a tube of sufficient length, which ran out through an aperture made for it in the sequoia bark, and would serve every purpose, provided it did not catch fire. Godfrey soon had the satisfaction of seeing a good fire burning without filling the interior of Will Tree with smoke.

He was quite right in hastening on these preparations, for from the 3rd to the 10th of November the rain never ceased pouring down. It would have been impossible to keep a fire going in the open air. During these miserable days they had to keep indoors and did not venture out except when the flocks and poultry urgently required them to do so. Under these circumstances the reserve of camas roots began to fail; and these were what took the place of bread, and of which the want would be immediately felt.

Godfrey then one day, the 10th of November, informed Tartlet that as soon as the weather began to mend a little he and Carefinotu would go out and collect some. Tartlet, who was never in a hurry to run a couple of miles across a soaking prairie, decided to remain at home during Godfrey's absence.

In the evening the sky began to clear of the heavy clouds which the west wind had been accumulating since the commencement of the month, the rain gradually ceased, the sun gave forth a few crepuscular rays. It was to be hoped that the morning would yield a lull in the storm, of which it was advisable to make the most.

"Tomorrow," said Godfrey, "I will go out, and Carefinotu will go with me."

"Agreed!" answered Tartlet.

The evening came, and when supper was finished and the sky, cleared of clouds, permitted a few brilliant stars to appear, the black wished to take up his accustomed place outside, which he had had to abandon during the preceding rainy nights. Godfrey tried to make him understand that he had better remain indoors, that there was no necessity to keep a watch as no wild animal had been noticed; but Carefinotu was obstinate. He therefore had to have his way.

The morning was as Godfrey had foreseen, no rain had fallen since the previous evening, and when he stepped forth from Will Tree, the first rays of the sun were lightly gilding the thick dome of the sequoias.

Carefinotu was at his post, where he had passed the night. He was waiting. Immediately, well armed and provided with large sacks, the two bade farewell to Tartlet, and started for the river, which they intended ascending along the left bank up to the camas bushes.

An hour afterward they arrived there without meeting with any unpleasant adventure. The roots were rapidly torn up and a large quantity obtained, so as to fill the sacks. This took three hours, so that it was about eleven o'clock in the morning when Godfrey and his companion set out on their return to Will Tree.

Walking close together, keeping a sharp look-out, for they could not talk to each other, they had reached a bend in the small river where there were a few large trees, grown like a natural cradle across the stream, when Godfrey suddenly stopped.

This time it was he who showed to Carefinotu a motionless animal at the foot of a tree whose eyes were gleaming with a singular light

"A tiger!" he exclaimed.

He was not mistaken. It was really a tiger of large stature resting on its hind legs with its forepaws on the trunk of a tree, and ready to spring.

In a moment Godfrey had dropped his sack of roots. The loaded gun passed into his right hand; he cocked it, presented it, aimed it, and fired.

"Hurrah! hurrah!" he exclaimed.

This time there was no room for doubt; the tiger, struck by the bullet, had bounded backward. But perhaps

he was not mortally wounded, perhaps rendered still more furious by his wound he would spring on to them! Godfrey held his gun pointed, and threatened the animal with his second barrel.

But before Godfrey could stop him, Carefinotu had rushed at the place where the tiger disappeared, his hunting-knife in his hand.

Godfrey shouted for him to stop, to come back! It was in vain. The black, resolved even at the risk of his life to finish the animal which perhaps was only wounded, did not or would not hear. Godfrey rushed after him.

When he reached the bank, he saw Carefinotu struggling with the tiger, holding him by the throat, and at last stabbing him to the heart with a powerful blow.

The tiger then rolled into the river, of which the waters, swollen by the rains, carried it away with the quickness of a torrent. The corpse, which floated only for an instant, was swiftly borne off toward the sea.

A bear! A tiger! There could be no doubt that the island did contain formidable beasts of prey!

Godfrey, after rejoining Carefinotu, found that in the struggle the black had only received a few scratches. Then, deeply anxious about the future, he retook the road to Will Tree.

CHAPTER XIX

THE MYSTERY BECOMES DEEPER

WHEN Tartlet learned that there were not only bears in the island, but tigers, too, his lamentations again arose. Now he would never dare to go out! The wild beasts would end by discovering the road to Will Tree! There was no longer any safety anywhere! In his alarm the professor wanted for his protection quite a fortification! Yes! Stone walls with scarps and counterscarps, curtains and bastions, and ramparts, for what was the use of a shelter under a group of sequoias? Above all things, he would at all risks, like to be off.

"So would I," answered Godfrey quietly.

In fact, the conditions under which the castaways on Phina Island had lived up to now were no longer the

same. To struggle to the end, to struggle for the necessaries of life, they had been able, thanks to fortunate circumstances. Against the bad season, against winter and its menaces, they knew how to act, but to have to defend themselves against wild animals, whose attack was possible every minute, was another thing altogether; and in fact they could not do it.

The situation, already complicated, had become very serious, for it had become intolerable.

"But," repeated Godfrey to himself, without cessation, "how is it that for four months we did not see a single beast of prey on the island, and why during the last fortnight have we had to encounter a bear and a tiger? What shall we say to that?"

The fact might be inexplicable, but it was none the less real. Godfrey, whose coolness and courage increased as difficulties grew, was not cast down. If dangerous animals menaced their little colony, it was better to put themselves on guard against their attacks, and that without delay.

But what was to be done? It was at the outset decided that excursions into the woods or to the sea-shore should be rarer, and that they should never go out unless well armed, and only when it was absolutely necessary for their wants.

"We have been lucky enough in our two encounters!" said Godfrey frequently; "but there may come a time when we may not shoot so straight! So there is no necessity for us to run into danger!"

At the same time they had not only to settle about the excursions, but to protect Will Tree—not only the dwelling, but the annexes, the poultry roost, and the fold for the animals, where the wild beasts could easily cause irreparable disaster.

Godfrey thought then, if not of fortifying Will Tree according to the famous plans of Tartlet, at least of connecting the four or five large sequoias which surrounded it.

If he could devise a high and strong palisade from one tree to another, they would be in comparative security at any rate from a surprise.

It was practicable—Godfrey concluded so after an examination of the ground—but it would cost a good deal

of labor. To reduce this as much as possible, he thought of erecting the palisade around a perimeter of only some three hundred feet. We can judge from this the number of trees he had to select, cut down, carry, and trim until the enclosure was complete.

Godfrey did not quail before his task. He imparted his projects to Tartlet, who approved them, and promised his active co-operation; but what was more important, he made his plans understood to Carefinotu, who was always ready to come to his assistance.

They set to work without delay. There was at a bend in the stream, about a mile from Will Tree, a small wood of stone pines of medium height, whose trunks, in default of beams and planks, without wanting to be squared, would, by being placed close together, form a solid palisade.

It was to this wood that, at dawn on the 12th of November, Godfrey and his two companions repaired. Though well armed they advanced with great care.

"You can have too much of this sort of thing," murmured Tartlet, whom these new difficulties had rendered still more discontented. "I would rather be off!"

But Godfrey did not take the trouble to reply to him. On this occasion his tastes were not being consulted, his intelligence even was not being appealed to. It was the assistance of his arms that the common interest demanded. In short, he had to resign himself to his vocation of beast of burden.

No unpleasant accident happened in the mile which separated the wood from Will Tree. In vain they had carefully beaten the underwood, and swept the horizon all around them. The domestic animals they had left out at pasture gave no sign of alarm. The birds continued their frolics with no more anxiety than usual.

Work immediately began. Godfrey, very properly did not want to begin carrying until all the trees he wanted had been felled. They could work at them in greater safety on the spot.

Carefinotu was of great service during this toilsome task. He had become very clever in the use of the axe and saw. His strength even allowed him to continue at work when Godfrey was obliged to rest for a minute or

so, and when Tartlet, with bruised hands and aching limbs, had not even strength left to lift his fiddle.

However, although the unfortunate professor of dancing and deportment had been transformed into a wood-cutter, Godfrey had reserved for him the least fatiguing part, that is, the clearing off of the smaller branches. In spite of this, if Tartlet had only been paid half a dollar a day, he would have stolen four-fifths of his salary!

For six days, from the 12th to the 17th of November, these labors continued. Our friends went off in the morning at dawn, they took their food with them, and they did not return to Will Tree until evening. The sky was not very clear. Heavy clouds frequently accumulated over it. It was harvest weather, with alternating showers and sunshine; and during the showers the wood-cutters would take shelter under the trees, and resume their task when the rain had ceased.

On the 18th all the trees, topped and cleared of branches, were lying on the ground, ready for transport to Will Tree.

During this time no wild beast had appeared in the neighborhood of the river. The question was, were there any more in the island, or had the bear and the tiger been—a most improbable event—the last of their species?

Whatever it was, Godfrey had no intention of abandoning his project of the solid palisade so as to be prepared against a surprise from savages, or bears, or tigers. Besides, the worst was over, and there only remained to take the wood where it was wanted.

We say "the worst was over," though the carriage promised to be somewhat laborious. If it were not so, it was because Godfrey had had a very practical idea, which materially lightened the task; this was to make use of the current of the river, which the flood occasioned by the recent rains had rendered very rapid, to transport the wood. Small rafts could be formed, and they would quietly float down to the sequoias, where a bar, formed by the small bridge, would stop them. From thence to Will Tree was only about fifty-five paces. If any of them showed particular satisfaction at this mode of procedure, it was Tartlet.

On the 18th the first rafts were formed, and they arrived

at the barrier without accident. In less than three days, on the evening of the 25th, the palisade had been all sent down to its destination.

On the morrow, the first trunks, sunk two feet in the soil, began to rise in such a manner as to connect the principal sequoias which surrounded Will Tree. A capping of strong flexible branches, pointed by the axe, assured the solidity of the wall.

Godfrey saw the work progress with extreme satisfaction, and delayed not until it was finished. "Once the palisade is done," he said to Tartlet, "we shall be really at home."

"We shall not be really at home," replied the professor dryly, "until we are in Montgomery Street, with your Uncle Kolderup." There was no disputing this opinion.

On the 26th of November the palisade was three parts done. It comprised among the sequoias attached one to another that in which the poultry had established themselves, and Godfrey's intention was to build a stable inside it. In three or four days the fence was finished. There only remaned to fit in a solid door, which would assure the closure of Will Tree.

But on the morning of the 27th of November the work was interrupted by an event which we had better explain with some detail, for it was one of those unaccountable things peculiar to Phina Island.

About eight o'clock, Carefinotu had climbed up to the fork of the sequoia, so as to more carefully close the hole by which the cold and rain penetrated, when he uttered a singular cry. Godfrey, who was at work at the palisade, raised his head and saw the black, with expressive gestures, motioning to him to join him without delay.

Godfrey, thinking Carefinotu would not have disturbed him unless he had serious reason, took his glasses with him and climbed up the interior passage, and passing through the hole, seated himself astride of one of the main branches. Carefinotu, pointing with his arm toward the rounded angle which Phina Island made to the north-east, showed a column of smoke rising in the air like a long plume.

"Again!" exclaimed Godfrey. And putting his glasses in the direction, he assured himself that this time there

was no possible error, that it must escape from some important fire, which he could distinctly see must be about five miles off.

Godfrey turned toward the black. Carefinotu expressed his surprise, by his looks, his exclamations, in fact by his whole attitude. Assuredly he was no less astounded than Godfrey at this apparition.

Besides, in the offing, there was no ship, not a vessel, native or other, nothing which showed that a landing had recently been made on the shore.

"Ah! This time I will find out the fire which produces that smoke!" exclaimed Godfrey.

And pointing to the north-east angle of the island, and then to the foot of the tree, he gesticulated to Carefinotu that he wished to reach the place without losing an instant.

Carefinotu understood him. He even gave him to understand that he approved of the idea.

"Yes," said Godfrey to himself, "if there is a human being there, we must know who he is and whence he comes! We must know why he hides himself! It will be for the safety of all!"

A moment afterward Carefinotu and he descended to the foot of Will Tree. Then Godfrey, informing Tartlet of what had passed and what he was going to do, proposed for him to accompany them to the north coast. A dozen miles to traverse in one day was not a very tempting suggestion to a man who regarded his legs as the most precious part of his body, and only designed for noble exercises. And so he replied that he would prefer to remain at Will Tree.

"Very well, we will go alone," answered Godfrey, "but do not expect us until the evening." So saying, Carefinotu and he carrying some provisions for lunch on the road, set out after taking leave of the professor, whose private opinion it was that they would find nothing, and that all their fatigue would be useless.

Godfrey took his musket and revolver; the black the axe and the hunting-knife which had become his favorite weapon. They crossed the plank bridge to the right bank of the river, and then struck off across the prairie to the point on the shore where the smoke had been seen rising among the rocks. It was rather more easterly than the

place which Godfrey had uselessly visited on his second exploration.

They progressed rapidly, not without a sharp look-out that the wood was clear and that the bushes and underwood did not hide some animal whose attack might be formidable. Nothing disquieting occurred.

At noon, after having had some food, without, however, stopping for an instant, they reached the first line of rocks which bordered the beach. The smoke, still visible, was rising about a quarter of a mile ahead. They had only to keep straight on to reach their goal.

They hastened their steps, but took precautions so as to surprise, and not be surprised.

Two minutes afterward the smoke disappeared, as if the fire had been suddenly extinguished. But Godfrey had noted with exactness the spot whence it arose. It was at the point of a strangely formed rock, a sort of truncated pyramid, easily recognizable. Showing this to his companion, he kept straight on. The quarter of a mile was soon traversed, then the last line was climbed, and Godfrey and Carefinotu gained the beach about fifty paces from the rock.

They ran up to it. Nobody! But this time half-smoldering embers and half-burned wood proved clearly that the fire had been alight on the spot.

"There has been some one here!" exclaimed Godfrey. "Some one not a moment ago! We must find out who!"

He shouted. No response! Carefinotu gave a terrible yell. No one appeared!

Behold them then hunting among the neighboring rocks, searching a cavern, a grotto, which might serve as a refuge for a shipwrecked man, an aboriginal, a savage—

It was in vain that they ransacked the slightest recesses of the shore. There was neither ancient nor recent camp in existence, not even the traces of the passage of a man.

"But," repeated Godfrey, "it was not smoke from a warm spring this time! It was from a fire of wood and grass, and that fire could not light itself."

Vain was their search. Then about two o'clock Godfrey and Carefinotu, as weary as they were disconcerted at their fruitless endeavors, retook their road to Will Tree.

There was nothing astonishing in Godfrey being deep in

thought. It seemed to him that the island was now under the empire of some occult power. The reappearance of this fire, the presence of wild animals, did not all this denote some extraordinary complication?

And was there not cause for his being confirmed in this idea when an hour after he had regained the prairie, he heard a singular noise, a sort of hard jingling?

Carefinotu pushed him aside at the same instant as a serpent glided beneath the herbage, and was about to strike at him. "Snakes, now. Snakes in the island, after the bears and the tigers!" he exclaimed.

Yes! It was one of those reptiles well-known by the noise they make, a rattlesnake of the most venomous species; a giant of the Crotalus family!

Carefinotu threw himself between Godfrey and the reptile, which hurried off under a thick bush. But the negro pursued it and smashed in its head with a blow of the axe. When Godfrey rejoined him, the two halves of the reptile were writhing on the blood-stained soil.

Then other serpents, not less dangerous, appeared in great abundance on this part of the prairie which was separated by the stream from Will Tree. Was it then a sudden invasion of reptiles? Was Phina Island going to become the rival of ancient Tenos, whose formidable ophidians rendered it famous in antiquity, and which gave its name to the viper?

"Come on! come on!" exclaimed Godfrey, motioning to Carefinotu to quicken his pace. He was uneasy. Strange presentiments agitated him without his being able to control them. Under their influence, fearing some approaching misfortune, he hastened his return to Will Tree.

Matters became serious when he reached the planks across the river. Screams of terror resounded from beneath the sequoias—cries for help in a tone of agony which it was impossible to mistake!

"It is Tartlet!" exclaimed Godfrey. "The unfortunate man has been attacked! Quick! quick!"

Once over the bridge, about twenty paces further on, Tartlet was perceived running as fast as his legs could carry him. An enormous crocodile had come out of the river and was pursuing him with its jaws wide open. The poor man, distracted, mad with fright, instead of turning

to the right or the left, was keeping in a straight line, and so running the risk of being caught. Suddenly he stumbled. He fell. He was lost.

Godfrey halted. In the presence of this imminent danger his coolness never forsook him for an instant. He brought his gun to his shoulder, and aimed at the crocodile. The well-aimed bullet struck the monster, and it made a bound to one side and fell motionless on the ground.

Carefinotu rushed toward Tartlet and lifted him up. Tartlet had escaped with a fright! But what a fright!

A moment afterward Godfrey and his two companions had reached Will Tree. How bitter were their reflections during their evening repast! What long, sleepless hours were in store for the inhabitants of Phina Island, on whom misfortunes were now crowding!

As for the professor, in his anguish he could only repeat the words which expressed the whole of his thoughts, "I had much rather be off!"

CHAPTER XX

DANGERS REACH A CLIMAX

THE winter season, so severe in these latitudes, had come at last. The first frosts had already been felt, and there was every promise of rigorous weather. Godfrey was to be congratulated on having established his fireplace in the tree. It need scarcely be said that the work at the palisade had been completed, and that a sufficiently solid door now assured the closure of the fence.

During the six weeks which followed, that is to say, until the middle of December, there had been a good many wretched days on which it was impossible to venture forth. At the outset there came terrible squalls. They shook the group of sequoias to their very roots. They strewed the ground with broken branches, and so furnished an ample reserve for the fire.

Then it was that the inhabitants of Will Tree clothed themselves as warmly as they could. The woolen stuffs found in the box were used during the few excursions necessary for revictualing, until the weather became so bad that even these were forbidden. All hunting was at an

end, and the snow fell in such quantity that Godfrey could have believed himself in the inhospitable latitudes of the Arctic Ocean.

It is well known that Northern America, swept by the Polar winds, with no obstacle to check them, is one of the coldest countries on the globe. The winter there lasts until the month of April. Exceptional precautions have to be taken against it. It was the coming of the winter as it did which gave rise to the thought that Phina Island was situated in a higher latitude than Godfrey had supposed.

Hence the necessity of making the interior of Will Tree as comfortable as possible. But the suffering from rain and cold was cruel. The reserves of provisions were unfortunately insufficient, the preserved turtle flesh gradually disappeared. Frequently there had to be sacrificed some of the sheep or goats or agouties, whose numbers had but slightly increased since their arrival in the island.

With these new trials, what sad thoughts haunted Godfrey! It happened also that for a fortnight he fell into a violent fever. Without the tiny medicine-chest which afforded the necessary drugs for his treatment, he might never have recovered. Tartlet was ill-suited to attend to the petty cares that were necessary during the continuance of the malady. It was to Carefinotu that he mainly owed his return to health.

But what remembrances and what regrets! Who but himself could he blame for getting into a situation of which he could not even see the end? How many times in his delirium did he call Phina, whom he never should see again, and his Uncle Will, from whom he beheld himself separated forever! Ah! he had to alter his opinion of this Crusoe life which his boyish imagination had made his ideal! Now he was contending with reality! He could no longer even hope to return to the domestic hearth.

So passed this miserable December, at the end of which Godfrey began to recover his strength.

As for Tartlet, by special grace, doubtless, he was always well. But what incessant lamentations! What endless jeremiads! As the grotto of Calypso after the departure of Ulysses, Will Tree "resounded no more to his

song"—that of his fiddle—for the cold had frozen the strings!

It should be said too that one of the gravest anxieties of Godfrey was not only the reappearance of dangerous animals, but the fear of the savages returning in great numbers to Phina Island, the situation of which was known to them. Against such an invasion the palisade was but an insufficient barrier. All things considered, the refuge offered by the high branches of the sequoia appeared much safer, and the rendering the access less difficult was taken in hand. It would always be easy to defend the narrow orifice by which the top of the trunk was reached.

With the aid of Carefinotu, Godfrey began to cut regular ledges on each side, like the steps of a staircase, and these, connected by a long cord of vegetable fiber, permitted of rapid ascent up the interior.

"Well," said Godfrey, when the work was done, "that gives us a town house below, and a country house above!"

"I had rather have a cellar, if it was in Montgomery Street!" answered Tartlet.

Christmas arrived. Christmas kept in such style throughout the United States of America! The New Year's Day, full of memories of childhood, rainy, snowy, cold, and gloomy, began the new year under the most melancholy auspices. It was six months since the survivors of the *Dream* had remained without communication with the rest of the world.

The commencement of the year was not very cheering. It made Godfrey and his companions anticipate that they would still have many trials to encounter. The snow never ceased falling until January 18th. The flocks had to be let out to pasture to get what feed they could. At the close of the day, a very cold damp night enveloped the island, and the space shaded by the sequoias was plunged in profound obscurity. Tartlet and Carefinotu, stretched on their beds inside Will Tree, were trying in vain to sleep. Godfrey, by the struggling light of a torch, was turning over the pages of his Bible.

About ten o'clock a distant noise, which came nearer and nearer, was heard outside away toward the north. There could be no mistake. It was the wild beasts prowling in the neighborhood, and, alarming to relate, the

howling of the tiger and of the hyæna, and the roaring of the panther and the lion were this time blended in one formidable concert.

Godfrey, Tartlet, and the negro sat up, each a prey to indescribable anguish. If at this unaccountable invasion of ferocious animals Carefinotu shared the alarm of his companions, his astonishment was quite equal to his fright.

During two mortal hours all three kept on the alert. The howlings sounded at times close by; then they suddenly ceased, as if the beasts, not knowing the country, were roaming about all over it. Perhaps then Will Tree would escape an attack!

"It doesn't matter if it does," thought Godfrey. "If we do not destroy these animals to the very last one, there will be no safety for us in the island!"

A little after midnight the roaring began again in full strength at a moderate distance away. Impossible now to doubt but that the howling army was approaching Will Tree!

Yes! It was only too certain! But whence came these wild animals? They could not have recently landed on Phina Island! They must have been there then before Godfrey's arrival! But how was it that all of them had remained hidden during his walks and hunting excursions, as well across the center as in the most out-of-the-way parts to the south? For Godfrey had never found a trace of them. Where was the mysterious den which vomited forth lions, hyænas, panthers, tigers? Among all the unaccountable things up to now this was indeed the most unaccountable.

Carefinotu could not believe what he heard. We have said that his astonishment was extreme. By the light of the fire which illuminated the interior of Will Tree there could be seen on his black face the strangest of grimaces.

Tartlet, in the corner, groaned and lamented, and moaned again. He would have asked Godfrey all about it, but Godfrey was not in the humor to reply. He had a presentiment of very great danger, and he was seeking for a way to retreat from it.

Once or twice Carefinotu and he went out to the center of the palisade. They wished to see that the door was firmly and strongly shut.

Suddenly an avalanche of animals appeared with a huge tumult along the front of Will Tree. It was the goats and sheep and agouties. Terrified at the howling of the wild beasts, and scenting their approach, they had fled from their pasturage to take shelter behind the palisade.

"We must open the door!" exclaimed Godfrey.

Carefinotu nodded his head. He did not need to know the language to understand what Godfrey meant. The door was opened, and the frightened flock rushed into the enclosure.

But at that instant there appeared through the opening a gleaming of eyes in the depths of the darkness which the shadow of the sequoias rendered still more profound. There was no time to close the enclosure!

To jump at Godfrey, seize him in spite of himself, push him into the dwelling and slam the door, was done by Carefinotu like a flash of lightning.

New roarings indicated that three or four wild beasts had just cleared the palisade. Then these horrible roarings were mingled with quite a concert of bleatings and groanings of terror. The domestic flock were taken as in a trap and delivered over to the clutches of the assailants.

Godfrey and Carefinotu, who had climbed up to the two small windows in the bark of the sequoia, endeavored to see what was passing in the gloom. Evidently the wild animals—tigers or lions, panthers or hyænas, they did not know which yet—had thrown themselves on the flock and begun their slaughter.

At this moment, Tartlet, in a paroxysm of blind terror, seized one of the muskets, and would have taken a chance shot out of one of the windows. Godfrey stopped him.

"No!" said he. "In this darkness our shots will be lost, and we must not waste our ammunition! Wait for daylight!"

He was right. The bullets would just as likely have struck the domestic as the wild animals—more likely in fact, for the former were the most numerous. To save them was now impossible. Once they were sacrificed, the wild beasts, thoroughly gorged, might quit the enclosure before sunrise. They would then see how to act to guard against a fresh invasion.

It was most important, too, during the dark night, to

avoid as much as possible revealing to these animals the presence of human beings, whom they might prefer to the flock. Perhaps they would thus avoid a direct attack against Will Tree.

As Tartlet was incapable of understanding either this reasoning or any other, Godfrey contented himself with depriving him of his weapon. The professor then went and threw himself on his bed and freely anathematized all travels and travelers and maniacs who could not remain quietly at their own firesides. Both his companions resumed their observations at the windows.

Thence they beheld, without the power of interference, the horrible massacre which was taking place in the gloom. The cries of the sheep and the goats gradually diminished as the slaughter of the animals was consummated, although the greater part had escaped outside, where death, none the less certain, awaited them. This loss was irreparable for the little colony; but Godfrey was not then anxious about the future. The present was disquieting enough to occupy all his thoughts.

There was nothing they could do, nothing they could try, to hinder this work of destruction.

Godfrey and Carefinotu kept constant watch, and now they seemed to see new shadows coming up and passing into the palisade, while a fresh sound of footsteps struck on their ears. Evidently certain belated beasts, attracted by the odor of the blood which impregnated the air, had traced the scent up to Will Tree.

They ran to and fro, they rushed around and around the tree and gave forth their hoarse and angry growls. Some of the shadows jumped on the ground like enormous cats. The slaughtered flock had not been sufficient to satisfy their rage. Neither Godfrey nor his companions moved. In keeping completely motionless they might avoid a direct attack. An unlucky shot suddenly revealed their presence and exposed them to the greatest danger.

Tartlet, a prey to a veritable hallucination, had arisen. He had seized a revolver; and this time, before Godfrey and Carefinotu could hinder him, and not knowing himself what he did, but believing that he saw a tiger standing before him, he had fired! The bullet passed through the

door of Will Tree. "Fool!" exclaimed Godfrey, throwing himself on Tartlet, while the negro seized the weapon.

It was too late. The alarm was given, and growlings still more violent resounded without. Formidable talons were heard tearing the bark of the sequoia. Terrible blows shook the door, which was too feeble to resist such an assault. "We must defend ourselves!" shouted Godfrey.

And, with his gun in his hand and his cartridge-pouch round his waist, he took his post at one of the windows.

To his great surprise, Carefinotu had done the same! Yes! the black, seizing the second musket—a weapon which he had never before handled—had filled his pockets with cartridges and taken his place at the second window.

Then the reports of the guns began to echo from the embrasures. By the flashes, Godfrey on the one side, and Carefinotu on the other, beheld the foes they had to deal with. There, in the enclosure, roaring with rage, howling at the reports, rolling beneath the bullets which struck many of them, leaped of lions and tigers, hyænas and panthers, at least a score. To their roarings and growlings which reverberated from afar, there echoed back those of other ferocious beasts running up to join them. Already the now distant roaring could be heard as they approached the environs of Will Tree. It was as though quite a menagerie of wild animals had been suddenly set free on the island!

However, Godfrey and Carefinotu, without troubling themselves about Tartlet, who could be of no use, were keeping as cool as they could, and refraining from firing unless they were certain of their aim. Wishing to waste not a shot, they waited till a shadow passed in front of them. Then came the flash and the report, and then a growl of grief told them that the animal had been hit.

A quarter of an hour elapsed, and then came a respite. Had the wild beasts given up the attack which had cost the lives of so many among them? Were they waiting for the day to recommence the attempt under more favorable conditions? Whatever might be the reason, neither Godfrey nor Carefinotu desired to leave his post. The black had shown himself no less ready with the gun than Godfrey. If that was due only to the instinct of imitation, it must be admitted that it was indeed surprising.

About two o'clock in the morning there came a new alarm—more furious than before. The danger was imminent, the position in the interior of Will Tree was becoming untenable. New growlings resounded around the foot of the sequoia. Neither Godfrey nor Carefinotu, on account of the situation of the windows, which were cut straight through, could see the assailants, nor, in consequence, could they fire with any chance of success.

It was now the door which the beasts attacked, and it was only too evident that it would be beaten in by their weight or torn down by their claws.

Godfrey and the black had descended to the ground. The door was already shaking beneath the blows from without. They could feel the heated breath making its way in through the cracks in the bark. Godfrey and Carefinotu attempted to prop back the door with the stakes which kept up the beds, but these proved quite useless.

It was obvious that in a little while it would be driven in—for the beasts were mad with rage—particularly as no shots could reach them.

Godfrey was powerless. If he and his companions were inside Will Tree when the assailants broke in, their weapons would be useless to protect them.

Godfrey had crossed his arms. He saw the boards of the door open little by little. He could do nothing. In a moment of hesitation, he passed his hand across his forehead, as if in despair. But soon recovering his self-possession, he shouted, "Up we go! Up! All of us!" And he pointed to the narrow passage which led up to the fork inside Will Tree.

Carefinotu and he, taking their muskets and revolvers, supplied themselves with cartridges.

And now he turned to make Tartlet follow them into these heights where he had never ventured before. Tartlet was no longer there. He had started up while his companions were firing. "Up!" repeated Godfrey.

It was a last retreat, where they would assuredly be sheltered from the wild beasts. If any tiger or panther attempted to come up into the branches of the sequoia, it would be easy to defend the hole through which he would have to pass.

Godfrey and Carefinotu had scarcely ascended thirty

feet, when the roaring was heard in the interior of Will Tree. A few moments more and they would have been surprised. The door had just fallen in. They both hurried along, and at last reached the upper end of the hole.

A scream of terror welcomed them. It was Tartlet, who imagined he saw a panther or tiger! The unfortunate professor was clasping a branch, frightened almost out of his life lest he should fall. Carefinotu went to him, and compelled him to lean against an upright bough, to which he firmly secured him with his belt.

Then, while Godfrey selected a place whence he could command the opening, Carefinotu went to another spot whence he could deliver a cross fire. And they waited.

Under these circumstances it certainly looked as though the besieged were safe from attack.

Godfrey endeavored to discover what was passing beneath them; but the night was still too dark. Then he tried to hear; the growlings, which never ceased, showed that the assailants had no thought of abandoning the place.

Suddenly, toward four o'clock in the morning, a great light appeared at the foot of the tree. At once it shot out through the door and windows. At the same time a thick smoke spread forth from the upper opening and lost itself in the higher branches.

"What is that now?" exclaimed Godfrey.

It was easily explained. The wild beasts, in ravaging the interior of Will Tree, had scattered the remains of the fire. The fire had spread to the things in the room. The flame had caught the bark, which had dried and become combustible. The gigantic sequoia was ablaze below. The position was now more terrible than it had ever been. By the light of the flames, which illuminated the space beneath the grove, they could see the wild beasts leaping around the foot of Will Tree. At the same instant, a fearful explosion occurred. The sequoia, violently wrenched, trembled from its roots to its summit. It was the reserve of gunpowder which had exploded inside Will Tree, and the air, violently expelled from the opening, rushed forth like the gas from a discharging cannon.

Godfrey and Carefinotu were almost torn from their resting-places. Had Tartlet not been lashed to the branch, he would assuredly have been hurled to the ground.

The wild beasts, terrified at the explosion, and more or less wounded, had taken to flight. But at the same time the conflagration, fed by the sudden combustion of the powder, had considerably extended. It swiftly grew in dimensions as it crept up the enormous stem.

Large tongues of flame lapped the interior, and the highest soon reached the fork, and the dead wood snapped and crackled like shots from a revolver. A huge glare lighted up, not only the group of giant trees, but even the whole of the coast from Flag Point to the southern cape of Dream Bay.

Soon the fire had reached the lower branches of the sequoia, and threatened to invade the spot where Godfrey and his companions had taken refuge. Were they then to be devoured by the flames, with which they could not battle, or had they but the last resource of throwing themselves to the ground to escape being burned alive? In either case they must die!

Godfrey sought about for some means of escape. He saw none! Already the lower branches were ablaze and a dense smoke was struggling with the first gleams of dawn which were rising in the east.

At this moment there was a horrible crash of rending and breaking. The sequoia, burned to the very roots, cracked violently—it toppled over—it fell!

But as it fell the stem met the stems of the trees which environed it; their powerful branches were mingled with its own, and so it remained obliquely cradled at an angle of about forty-five degrees from the ground. At the moment that the sequoia fell, Godfrey and his companions believed themselves lost!

"Nineteenth of January!" exclaimed a voice, which Godfrey, in spite of his astonishment, immediately recognized. It was Carefinotu! Yes, Carefinotu had just pronounced these words, and in that English language which up to then he had seemed unable to speak or to understand!

"What did you say?" asked Godfrey, as he followed him along the branches.

"I said, Mr. Morgan," answered Carefinotu, "that today your Uncle Will ought to reach us, and that if he doesn't turn up we are done for!"

CHAPTER XXI

ALL THE MYSTERIES SOLVED

At that instant, and before Godfrey could reply, the report of fire-arms was heard not far from Will Tree.

At the same time one of those rain storms, regular cataracts in their fury, fell in a torrential shower just as the flames devouring the lower branches were threatening to seize upon the trees against which Will Tree was resting.

What was Godfrey to think after this series of inexplicable events? Carefinotu speaking English like a cockney, calling him by his name, announcing the early arrival of Uncle Will, and then the sudden report of the fire-arms?

He asked himself if he had gone mad; but he had no time for insoluble questions, for below him—hardly five minutes after the first sound of the guns—a body of sailors appeared hurrying through the trees.

Godfrey and Carefinotu slipped down along the stem, the interior of which was still burning.

The moment that Godfrey touched the ground, he heard himself spoken to, and by two voices which even in his trouble it was impossible for him not to recognize.

"Nephew Godfrey, I have the honor to salute you!"

"Godfrey! Dear Godfrey!"

"Uncle Will! Phina! You!" exclaimed Godfrey, astounded. Three seconds afterward he was in somebody's arms, and was clasping that somebody in his own.

At the same time two sailors, at the order of Captain Turcott who was in command, climbed up along the sequoia to set Tartlet free, and, with all due respect, pluck him from the branch as if he were a fruit. And then the questions, the answers, the explanations which passed!

"Uncle Will! You?"

"Yes! me!"

"And how did you discover Phina Island?"

"Phina Island!" answered William W. Kolderup. "You should say Spencer Island! Well, it wasn't very difficult. I bought it six months ago!"

"Spencer Island!"

"And you gave my name to it, you dear Godfrey!" said the young lady.

"The new name is a good one, and we will keep to it," answered the uncle; "but for geographers this is Spencer Island, only three days' journey from San Francisco, on which I thought it would be a good plan for you to serve your apprenticeship to the Crusoe business!"

"Oh! Uncle! Uncle Will! What is it you say?" exclaimed Godfrey. "Well, if you are in earnest, I can only answer that I deserved it! But then, Uncle Will, the wreck of the *Dream?*"

"Sham!" replied William W. Kolderup, who had never seemed in such a good humor before. "The *Dream* was quietly sunk by means of her water ballast, according to the instructions I had given Turcott. You thought she sank for good, but when the captain saw that you and Tartlet had gotten safely to land he brought her up and steamed away. Three days later he got back to San Francisco, and he it is who has brought us to Spencer Island on the date we fixed!"

"Then none of the crew perished in the wreck?"

"None—unless it was the unhappy Chinaman who hid himself away on board and could not be found!"

"But the canoe?"

"Sham! The canoe was of my own make."

"But the savages?"

"Sham! The savages whom luckily you did not shoot!"

"But Carefinotu?"

"Sham! Carefinotu was my faithful Jup Brass, who played his part of Friday marvelously well, as I see."

"Yes," answered Godfrey. "He twice saved my life—once from a bear, once from a tiger—"

"The bear was sham! the tiger was sham!" laughed William W. Kolderup. "Both of them were stuffed with straw, and landed before you saw them with Jup Brass and his companions!"

"But he moved his head and his paws!"

"By means of a spring which Jup Brass had fixed during the night a few hours before the meetings which were prepared for you."

"What! all of them?" repeated Godfrey, a little ashamed at having been taken in by these artifices.

"Yes! Things were going too smoothly in your island, and we had to get up a little excitement!"

"Then," answered Godfrey, who had begun to laugh, "if you wished to make matters unpleasant for us, why did you send us the box which contained everything we wanted?"

"A box?" answered William W. Kolderup. "What box? I never sent you a box! Perhaps by chance—" And he looked toward Phina, who cast down her eyes and turned away her head.

"Oh! indeed!—a box! but then Phina must have had an accomplice—"

And Uncle Will turned toward Captain Turcott, who laughingly answered, "What could I do, Mr. Kolderup? I can sometimes resist you—but Miss Phina—it was too difficult! And four months ago, when you sent me to look around the island, I landed the box from my boat—"

"Dearest Phina!" said Godfrey, seizing the young lady's hand.

"Turcott, you promised to keep the secret!" said Phina with a blush. And Uncle William Kolderup, shaking his big head, tried in vain to hide that he was touched.

But if Godfrey could not restrain his smiles as he listened to the explanations of Uncle Will, Prof. Tartlet did not laugh in the least! He was excessively mortified at what he heard! To have been the object of such a mystification, he, a professor of dancing and deportment! And so advancing with much dignity he observed, "Mr. William Kolderup will hardly assert, I imagine, that the enormous crocodile, of which I was nearly the unhappy victim, was made of pasteboard and wound up with a spring?"

"A crocodile?" replied the uncle.

"Yes, Mr. Kolderup," said Carefinotu, to whom we had better return his proper name of Jup Brass. "Yes, a real live crocodile, which went for Mr. Tartlet, and which I did not have in my collection!"

Godfrey then related what had happened, the sudden appearance of the wild beasts in such numbers, real lions, real tigers, real panthers, and then the invasion of the snakes, of which during four months they had not seen a single specimen in the island!

William W. Kolderup at this was quite disconcerted. He knew nothing about it. Spencer Island—it had been known for a long time—never had any wild beasts, did

not possess even a single noxious animal; it was so stated in the deeds of sale.

Neither did he understand what Godfrey told him of the attempts he had made to discover the origin of the smoke which had appeared at different points on the island. And he seemed very much troubled to find that all had not passed on the island according to his instructions, and that the program had been so seriously interfered with.

As for Tartlet, he was not the sort of man to be humbugged. For his part he would admit nothing, neither the sham shipwreck, nor the sham savages, nor the sham animals, and above all he would never give up the glory which he had gained in shooting with the first shot from his gun the chief of the Polynesian tribe—one of the servants of the Kolderup establishment, who turned out to be as well as he was.

All was described, all was explained, except the serious matter of the real wild beasts and the unknown smoke. Uncle Will became very thoughtful about this. But, like a practical man, he put off, by an effort of the will, the solution of the problems, and addressing his nephew, "Godfrey," said he, "you have always been so fond of islands, that I am sure it will please you to hear that this is yours —wholly yours! I make you a present of it! You can do what you like with it!—I never dreamed of bringing you away by force; and I would not take you away from it! Be then a Crusoe for the rest of your life, if your heart tells you to—"

"I!" answered Godfrey. "I! All my life!"

Phina stepped forward. "Godfrey," she asked, "would you like to remain on your island?"

"I would rather die!" he exclaimed. But immediately he added, as he took the young lady's hand, "Well, yes, I will remain; but on three conditions. The first is, you stay with me, dearest Phina; the second is, that Uncle Will lives with us; and the third is, that the chaplain of the *Dream* marries us this very day!"

"There is no chaplain on board the *Dream,* Godfrey!" replied Uncle Will. "You know that very well. But I think there is still one left in San Francisco, and that we can find some worthy minister to perform the service!

I believe I read your thoughts when I say that before tomorrow we shall put to sea again!"

Then Phina and Uncle Will asked Godfrey to do the honors of his island. Behold them then walking under the group of sequoias, along the stream up to the little bridge.

Alas! of the habitation at Will Tree nothing remained. The fire had completely devoured the dwelling in the base of the tree! Without the arrival of William W. Kolderup, what with the approaching winter, the destruction of their stores, and the genuine wild beasts in the island, our Crusoes would have deserved to be pitied.

"Uncle Will!" said Godfrey, "if I gave the island the name of Phina, let me add that I gave our dwelling the name of Will Tree!"

"Well," answered the uncle, "we will take away some of the seed, and plant it in my garden at 'Frisco!"

During the walk they noticed some wild animals in the distance; but they dared not attack so formidable a party as the sailors of the *Dream.* But none the less was their presence absolutely incomprehensible.

Then they returned on board, not without Tartlet asking permission to bring off "his crocodile"—a permission which was granted. That evening the party were united in the saloon of the *Dream,* and there was quite a cheerful dinner to celebrate the end of the adventures of Godfrey Morgan and his marriage with Phina Hollaney.

On the morrow, the 20th of January, the *Dream* set sail under the command of Captain Turcott. At eight o'clock in the morning Godfrey, not without emotion, saw the horizon in the west wipe out, as if it were a shadow, the island on which he had been to school for six months—a school of which he never forgot the lessons.

The passage was rapid; the sea magnificent; the wind favorable. This time the *Dream* went straight to her destination! There was no one to be mystified! She made no tackings without number as on the first voyage! She did not lose during the night what she had gained during the day!

And so on the 23rd of January, after passing at noon through the Golden Gate, she entered the vast bay of San Francisco, and came alongside the wharf in Merchant Street.

And what did they then see? They saw issue from the hold a man who, having swum to the *Dream* during the night while she was anchored at Phina Island, had succeeded in stowing himself away for the second time! And who was this man ? It was the Chinaman, Seng Vou, who had made the passage back as he had made the passage out!

Seng Vou advanced toward William W. Kolderup. "I hope Mr. Kolderup will pardon me," said he very politely. "When I took my passage in the *Dream,* I thought she was going direct to Shanghai, and then I should have reached my country, but I leave her now, and return to San Francisco."

Every one, astounded at the apparition, knew not what to answer, and laughingly gazed at the intruder. "But," said William W. Kolderup at last, "you have not remained six months in the hold, I suppose?"

"No!" answered Seng Vou.

"Where have you been, then?"

"On the island!"

"You!" exclaimed Godfrey.

"Yes."

"Then the smoke?"

"A man must have a fire!"

"And you did not attempt to come to us, to share our living?"

"A Chinaman likes to live alone," quietly replied Seng Vou. "He is sufficient for himself, and he wants no one!" And thereupon this eccentric individual bowed to William W. Kolderup, landed, and disappeared.

"That is the stuff they make real Crusoes of!" observed Uncle Will. "Look at him and see if you are like him! It does not matter, the English race would do no good by absorbing fellows of that stamp!"

"Good!" said Godfrey, "the smoke is explained by the presence of Seng Vou; but the beasts?"

"And my crocodile!" added Tartlet; "I should like some one to explain my crocodile!"

William W. Kolderup seemed much embarrassed, and feeling in turn quite mystified, passed his hand over his forehead as if to clear the clouds away.

"We shall know later on," he said. "Everything is found by him who knows how to seek!"

A few days afterward there was celebrated with great pomp the wedding of the nephew and goddaughter of William W. Kolderup. That the young couple were made much of by all the friends of the wealthy merchant can easily be imagined.

At the ceremony Tartlet was perfect in bearing, in everything, and the pupil did honor to the celebrated professor of dancing and deportment.

Now Tartlet had an idea. Not being able to mount his crocodile on a scarf-pin—and much he regretted it—he resolved to have it stuffed. The animal prepared in this fashion—hung from the ceiling, with the jaws half open, and the paws outspread—would make a fine ornament for his room. The crocodile was consequently sent to a famous taxidermist, and he brought it back to Tartlet a few days afterward. Every one came to admire the monster who had almost made a meal of Tartlet.

"You know, Mr. Kolderup, where the animal came from?" said the celebrated taxidermist, presenting his bill.

"No, I do not," answered Uncle Will.

"But it had a label underneath its carapace."

"A label!" exclaimed Godfrey.

"Here it is," said the celebrated taxidermist.

And he held out a piece of leather on which, in indelible ink, were written these words:

"From Hagenbeck, Hamburg,
"To J. R. Taskinar, Stockton, U. S. A."

When William W. Kolderup had read these words he burst into a shout of laughter. He understood all.

It was his enemy, J. R. Taskinar, his conquered competitor, who, to be revenged, had bought a cargo of wild beasts, reptiles, and other objectionable creatures from a well-known purveyor to the menageries of both hemispheres, and had landed them at night in several voyages to Spencer Island. It had cost him a good deal, no doubt, to do so; but he had succeeded in infesting the property of his rival, as the English did Martinique, if we are to believe the legend, before it was handed over to France.

There was thus no more to explain of the remarkable occurrences on Phina Island.

"Well done!" exclaimed William W. Kolderup. "I could not have done better myself!"

"But with those terrible creatures," said Phina, "Spencer Island—"

"Phina Island—" interrupted Godfrey.

"Phina Island," continued the bride, with a smile, "is quite uninhabitable."

"Bah!" answered Uncle Will; "we can wait till the last lion has eaten up the last tiger!"

"And then, dearest Phina," said Godfrey, "you will not be afraid to pass a season there with me?"

"With you, my dear husband, I fear nothing from anywhere," answered Phina, "and as you have not had your voyage around the world—"

"We will have it together," said Godfrey, "and if an unlucky chance should ever make me a real Crusoe—"

"You will ever have near you the most devoted of Crusoe-esses!"

THE END.

The Star of the South

or

The Vanished Diamond

A South African Romance

The Star of the South

CHAPTER I

ONE FOR THE FRENCHMAN

GO on, I am listening."

"I have the honor to ask you for your daughter's hand."

"Alice?"

"Yes. My request seems to surprise you. Perhaps you will forgive me if I have some difficulty in understanding why it appears so strange. I am twenty-six years old; my name is Victor Cyprien; I am a mining engineer, and left the Polytechnic as second on the list. My family is honest and respected, if it is not rich. The French consul at Capetown can answer any questions about me you are likely to ask, and my friend Pharamond Barthes, the explorer, whom you—like everybody else in Griqualand—know right well, can add his testimony. I am here on a scientific mission in the name of the Academy of Sciences and the French Government. Last year I gained the Houdart prize at the Institute for my researches on the chemistry of the volcanic rocks of Auvergne. My paper on the diamantiferous basin of the Vaal, which is nearly finished, is sure of a good reception from the scientific world. When I started on my mission I was appointed Assistant-Professor at the Paris School of Mines, and I have already engaged my rooms on the third floor at No. 104 of the Rue Université. My appointments will, during the first year, bring me in two hundred pounds. That is hardly an El Dorado, I know, but with my private work I can nearly double it. My wants being few, I have enough to be happy on. And so, Mr. Watkins, I have the honor to ask you for your daughter's hand."

From the firm, decided tone of this little speech it was

easy to see that Cyprien was accustomed to go straight to the point in what he did, and to speak his mind freely.

His looks did not belie his words. They were those of a young man habitually occupied in the abstrusest problems of science, and only giving to worldly vanities the time that was absolutely necessary. All about him showed an earnest and serious disposition, while his clear, keen glance proclaimed an untroubled conscience. He was by birth a Frenchman, but he spoke English as well as if he had lived all his life beneath the British flag.

Seated in his arm-chair, with his left leg thrust out on to a stool, and his elbow resting on the table, Mr. Watkins listened to Cyprien's speech and puffed away at his pipe. The old man wore white trousers, a blue linen jacket, and a yellow flannel shirt, and had neither waistcoat nor cravat. His huge felt hat seemed to be screwed on to his gray head. The red, bloated face was cut into by a bristly beard, and lighted up by two little gray eyes that spoke of anything but patience and good-nature.

As some excuse for Mr. Watkins, it may be mentioned that he was a terrible sufferer from the gout—hence his bandaged leg; and the gout in Africa, as elsewhere, is not calculated to soften the asperities of a man's character.

The scene is at Watkins' Farm, in lat. 29° S., long. 25° E., on the western border of the Orange Free State, and nearly five hundred miles from Capetown. On the older maps the surrounding district bears the title of Griqualand, but for the last dozen years it has been better known as the Diamond Fields.

The parlor in which the interview is in progress is as remarkable for the luxury of some of its furniture as for the poverty of the rest. The floor is simply the natural earth leveled and beaten flat, and this is covered here and there with thick carpets and precious furs. The walls are destitute of paper or paint, and yet they are decked with a magnificent candelabrum, and valuable weapons of various kinds hang side by side with gorgeously colored lithographs in resplendent frames. A velvet sofa stands next to a plain deal table, such as is generally found in kitchens. Arm-chairs direct from Europe offer their arms in vain to Mr. Watkins, who is taking his ease in a solid construction of his own design. On the whole, however,

the heap of objects of value, and the numerous furs—panther-skins, leopard-skins, giraffe-skins, and tiger-cat-skins, that cover nearly every article of furniture, give the room a certain air of barbarous wealth.

The ceiling shows that the house is not built in stories; it can only boast of a ground floor. Like all the rest in the neighborhood, its walls are of planks and clay, and its roof of corrugated iron.

It is obviously a new house. From its windows, to the right and left of it, can be seen five or six abandoned buildings of the same order of architecture, but of different ages, in various stages of decay. These are the mansions that Mr. Watkins has successively built, inhabited, and deserted as he built up his fortune, and now serve to mark the several steps of his progress to affluence.

That farthest off is a hut of sods. Next to it comes one with walls of clay. The third has walls of clay and wood. The fourth rejoices in a little zinc.

The group of buildings is situated on a gentle rise that commands the junction of the Vaal and the Modder, the two principal tributaries of the Orange. Around, as far as the eye can see, there stretches the bare and dreary-looking plain. The Veld, as this plain is called, has a reddish soil, dry, barren, and dusty, with here and there at considerable intervals a straggling bush or a clump of thorn-shrubs.

The total absence of trees is characteristic; and as there is no coal, owing to the communication with the sea being so difficult and lengthy, the only fuel for domestic purposes is that yielded by the sheep's droppings.

Through this dismal and monotonous plain there flow the two rivers, with their banks so low and sloping that it is difficult to understand why the water does not break its bounds and flood the country.

Eastward the horizon is cut by the distant outlines of two mountains, the Platberg and the Paardeberg, at whose base the dust and smoke and the little white spots of huts and tents denote a busy human colony.

It is in this Veld that the diamond mines are situated—Dutoit's Pan, New Rush, and perhaps the richest of all, Vandergaart Kopje. These dry diggings, as mines open to the sky are called, have since 1870 yielded about

16,000,000*l.* in diamonds and precious stones. They are all close together, and can be distinctly seen with a good glass from the windows of Watkins' Farm, about four miles away.

Farm, by-the-bye, is rather a misnomer. There are no signs of cultivation in the neighborhood. Like all the so-called farmers of this part of South Africa, Mr. Watkins is rather a master shepherd, an owner of flocks and herds,. than an agriculturist.

But Mr. Watkins has not yet replied to the question put to him so clearly and politely by our hero. After giving himself three minutes for reflection, he decided to remove his pipe from his lips. Then he made the following observation, which would seem to be but very distantly connected with the subject at issue.

"I think we shall have a change in the weather! My gout never worried me more than it has done since this morning."

The young engineer frowned, and turned away his head for a moment. It was only by an effort that he concealed his disappointment.

"It might do you good if you were to give up your gin, Mr. Watkins," replied he, very dryly, pointing to the jug on the table.

"Give up my gin! Well, that's a good 'un!" exclaimed the farmer. "Is it the gin that does it? Oh! I know what you are driving at. You mean the medicine the Lord Mayor was recommended when he had the gout. Whose was it? Abernethy's? 'If you want to be well, live on a shilling a day and earn it.' That's all very fine. But if you have to live on a shilling a day to be well, what's the use of making a fortune? Such rubbish is unworthy of a sensible man like you. So don't say any more about it. I'll do as I please. I'll eat well, drink well, and smoke a good pipe when I am worried. I have no other pleasure in this world, and you want me to give it up, do you?"

"It is a matter of no consequence," answered Cyprien; "I only dropped a hint that I thought might be of use to you. But let it pass, Mr. Watkins, if you please, and get back to the special object of my visit."

The farmer's flow of eloquence came to a sudden pause. He relapsed into silence and puffed away at his pipe.

And now the door opened, and a young lady entered, carrying a glass on a salver.

And very charming she looked in her neat print dress and large white cap, such as is always worn by the ladies of the Veld. Aged about nineteen or twenty, with singularly clear complexion, fair, silky hair, pure blue eyes, and gentle, thoughtful face, she was quite a picture of health, grace, and good-nature.

"Good morning, Mr. Cyprien."

"Good morning, Miss Watkins!" answered Cyprien, rising and bowing.

"I saw you come in," said Alice, "and as I know you don't care for papa's horrible gin, I have brought you some orangeade, which I hope you will find to your taste."

"It is very kind of you, I am sure."

"Of course it is! Now, what do you think my ostrich Dada gobbled up this morning? The ivory ball I darn the stockings on! Yes, my ivory ball; and it is of good size, as you know. Well, that greedy Dada swallowed it as if it had been a pill. I know he will give me serious trouble some day."

As she said this the laughing look in her eyes did not betray much alarm at the anticipated sorrow. In an instant, however, there was a change. With quick intuition she noticed the constraint that her father and Cyprien felt at her presence.

"I am an intruder, I see," she said. "I am sorry I should have interrupted you, particularly as I have no time to lose. I must study my sonata before I begin to look after the dinner. I am sure no one could complain of your talkativeness today, gentlemen. I leave you to your conspiracies."

She had reached the door, when she turned around and gravely said, as if the subject were of the deepest importance, "When you wish to talk about oxygen, Mr. Cyprien, I am quite prepared for you. Three times have I read over the chemical lesson you gave me to learn, and 'the gaseous, colorless, scentless, and tasteless body' has no longer any secrets from me."

And with that Miss Watkins dropped a slight curtsy

and disappeared like a meteor. A moment later the notes of an excellent piano, heard from one of the rooms at some distance from the parlor, announced that the daughter of the house was engaged in her musical exercises.

"Well, Mr. Watkins," said Cyprien, reminded of his request by this apparition—if it had been possible for him to forget it—"will you give me an answer to the question I had the honor to ask you?"

Mr. Watkins removed his pipe from the corner of his mouth, expectorated with great majesty, abruptly raised his head, and looked at the young man with the air of a grand inquisitor.

"Was it by chance that you spoke about this to her?"

"Spoke about what? To whom?"

"What you have been talking about now; my daughter."

"For whom do you take me, Mr. Watkins?" replied the young engineer, warmly. "I am a Frenchman, sir, and that is to say, that without your consent I should never think of speaking to your daughter about marriage."

Mr. Watkins looked somewhat mollified, and his tongue seemed to move more freely. "So much the better, my boy. I expected no less of you," answered he, in almost a cordial tone. "And now as I can trust you, you will give me your word of honor never to speak of it in the future."

"And why, sir?"

"Because the marriage is impossible, and the best thing you can do is to drop all thoughts of it," continued the farmer. "Mr. Cyprien, you are an honest young fellow, a perfect gentleman, an excellent chemist, a distinguished professor, and have a brilliant future; I do not doubt it at all. But you will never have my daughter, and that because I have quite different plans for her."

"But, Mr. Watkins—"

"Say no more; it is useless," interrupted the farmer. "If you were an English duke, you might convince me; but you are not even an English subject, and you have just told me with perfect frankness that you have no money! Look you here; do you seriously think that, educating Alice as I have done, giving her the best masters of Victoria and Bloemfontein, I had intended to send her, as soon as she was twenty, to Paris, on the third floor at

No. 104 of the Roo University, to live with a man whose language I don't even understand? Just give that a thought, and put yourself in my place. Suppose you were John Watkins, farmer and proprietor of Vandergaart Kopje Mine, and I was Victor Cyprien, on a scientific mission to the Cape; suppose that you here were seated in this chair, smoking your pipe; suppose that you were I, and I were you; would you for a moment think of giving me your daughter in marriage?"

"Certainly I would, Mr. Watkins," replied Cyprien, "and without the slightest hesitation, if I thought you were likely to make her happy."

"Oh! ah! Well, then, you would be wrong. You would act like a man unworthy of being the owner of Vandergaart Kopje, or rather, you never would have been the owner of it! For do you think I only had to hold my hand out as it came by? Do you think I wanted neither sense nor energy when I found it out and made it my property? Well, Mr. Cyprien, the sense I showed in that affair, I show and will show in every act of my life, and particularly in all that concerns my daughter. And so I say, drop it. Alice will never be yours." And at this triumphant conclusion Mr. Watkins tossed off his glass.

The young engineer was silent, and the old man continued, "You Frenchmen are an astonishing lot! There is nothing very backward about you. You come here as if you had dropped from the moon into this out-of-the-way spot in Griqualand, call on a man who had never heard of you three months ago, and who has not set eyes on you a dozen times, and say to him, 'John Stapleton Watkins, you have a nice daughter, well educated, everywhere known as the pride of the place, and, what is anything but a draw-back, the sole heiress of the richest diamond kopje in the world. I am Mr. Victor Cyprien, of Paris, an engineer with two hundred a year, and I should like you to give me your daughter, so that I can take her home, and you can never hear of her for the future, except by post or telegraph!' And you think that is quite natural? I think it is consummate impudence!"

Cyprien rose, looking very pale. He picked up his hat and prepared to leave.

"Yes, consummate impudence!" continued the farmer.

"No gilded pills for me. I am an Englishman of the old sort, sir. I have been poorer than you—yes, much poorer. I have tried my hand at everything. I have been a cabin-boy on a merchant ship, a buffalo-hunter in Dakota, a digger in Arizona, and a shepherd in the Transvaal. I have known heat and cold and hunger and trouble. For twenty years I earned my crust by the sweat of my brow. When I married Alice's mother, we hadn't enough to feed a goat on. But I worked. I never lost courage. And now I am rich, and intend to profit by the fruit of my labors. I am going to keep my daughter to nurse me, to look after my gout, and to give me some music in the evening when I am tired. If she ever marries, she will marry here; and she will marry some fellow who lives here, a farmer or a digger like I am, and who will not talk to me of semi-starvation in a third floor in a country that I never had the slightest desire to go near. She will marry James Hilton or some fellow of that stamp. There will be no lack of offers."

Cyprien had already reached the door.

"No animosity, my boy; I wish you no harm. I shall always be glad to see you as a tenant and a friend. We have got some people coming to dinner this evening. Will you make one?"

"No, thank you, sir," answered Cyprien, coldly. "I have my letters to write for the mail."

"One for the Frenchman!" chuckled Mr. Watkins.

CHAPTER II

TO THE DIAMOND FIELDS

WHAT most humiliated the young engineer in the answer he received from Mr. Watkins was the fact that, in spite of the rudeness in which it was couched, the decision was not unreasonable. When he came to think matters over, he was surprised at himself for not having seen the farmer's very obvious objections.

But the fact is, that up till then he had never dreamed of the difference of fortune, race, and education between the young lady and himself. Accustomed for the last five or six years to regard minerals merely from their scientific

point of view, diamonds were in his eyes but specimens of carbon adapted for exhibition in the museum of the School of Mines. In France he had moved in quite a different social circle from what he did here, and he had quite lost sight of the commercial value of the rich mine possessed by the farmer. The thought that there was a difference in station between the daughter of the owner of Vandergaart Kopje and himself had never entered his head.

The sharp reprimand he had received from Watkins awoke him from his illusion. Cyprien had too much sense not to appreciate the farmer's reasons, and too much honesty to be angry at a decision which he admitted was, in the main, a just one.

But the blow was none the less severe, and now that he had to give up Alice he found how dear she had become to him in those three months. For only three months had elapsed since his arrival in Griqualand.

How far off it all seemed!

Landing with his friend Pharamond Barthes—an old schoolfellow who had come out to South Africa on his third hunting and exploring expedition—he had separated from him at the Cape. Barthes started for Basutoland to engage an escort; Cyprien secured a seat in the heavy, lumbering, fourteen-horse wagon—the stage-coach of the Veld—and set out for the Diamond Fields.

Five or six huge cases—a complete chemical and mineralogical laboratory, from which he was very loath to part—formed the luggage of the youthful scientist; but the coach only allowed a hundredweight of luggage to each passenger, and he had consequently been obliged to entrust his precious cases to the tender mercies of a bullock cart.

The "coach" held twelve passengers. It was covered with a canvas tilt, and had four enormous wheels constantly wet from crossing the fords. The horses, which were occasionally replaced by mules, were harnessed in pairs, and driven by two coachmen seated side by side on the front bench. One held the reins, while the other manipulated a tremendously long bamboo whip, not unlike a huge fishing-rod, and used it to guide the horses as well as to urge them on.

The road goes by Beaufort, a pleasant little place at the foot of the Nieuwveld Mountains, across the hills to

Victoria, then to Hopetown on the Orange, and thence to Kimberley and the principal diamond centers, which are but a few miles away from it.

It is a wearying, monotonous journey across the Veld, and takes from eight to nine days. The landscape is most miserable—red plains, scattered stones like moraine rubbish on the surface, and gray rock cropping out from below, half-starved-looking bushes, and here and there a stunted sickly plant. At long intervals a few dilapidated farms doing duty for inns. The hospitality of these inns is somewhat rudimentary. The "good accommodation for man and beast" comprises neither a bed for the man nor litter for the beast, and the provisions are tinned ones that have gone the round of the world, and sell at the buyer's risk for their weight in gold.

There being nothing for the horses at the farms, the teams are unharnessed and allowed to wander about in search of their own food. They have to be caught again before a start can be made, and the loss of time thus occasioned may be imagined.

Great is the jolting of the primitive coach along the still more primitive roads. The seats are the lids of the wooden lockers which hold the light luggage of the passengers, and on them for a week or more their possessors go thump-jump, like so many forge hammers, as the wagon rolls along. Impossible to read, impossible to sleep, nay, even impossible to talk!

Cyprien's fellow-travelers were fairly representative of the floating population peculiar to gold and diamond fields. There was an ungainly Neapolitan, with long black hair, a face like parchment, and a pair of glittering treacherous-looking eyes, who said his name was Annibale Pantalacci; a Portuguese Jew named Nathan, an expert in diamonds, who kept himself quiet in a corner and looked upon humanity like a philosopher; a tall collier, Thomas Steel, with a red beard and broad shoulders, who had left his native Lancashire to try his fortune in Griqualand; a German, Herr Fredel, who spoke like an oracle, and knew everything about diamonds and diamond digging—in theory; a thin-lipped Yankee, who reckoned to open a canteen and persuade the miners to waste their hard-earned wealth; a farmer from the Hartz; a Boer from the Orange

Free State; an ivory trader on his way to Namaqualand; two Transvaal colonists; and a Chinaman named Li—like every other Chinaman—made up the most heterogeneous, noisy, and disorderly company in which it was ever given to a man to find himself.

At first Cyprien was amused, but not for long. There was only Steel, with his massive strength and loud laughter, and Li, with his gentle catlike ways, in whom he continued to take the slightest interest. To the Neapolitan, with his spiteful buffooneries, he felt the strongest aversion.

One of the most popular jokes of this personage consisted in his tying on to the Chinaman's pigtail, whenever he got an opportunity, a collection of miscellaneous objects, such as bundles of greens, cabbage-stalks, a cow's tail, and a horse's bladebone, picked up on the road.

The Chinaman unconcernedly removed the articles from his appendage, and neither by word, look, nor gesture showed that he considered the pleasantry beyond the bounds of propriety. His yellow face and little almond eyes were as unalterably placid as if he were quite a stranger to what was passing around him. In fact it seemed as though he understood not a word of all that was spoken in this Noah's Ark bound north for Griqualand.

And Annibale Pantalacci, in his broken English, was profuse in his very vulgar witticisms on the same subject, and kept the travelers in a roar of laughter. What made the laugh all the longer was that the Boers invariably took some time to see the joke, and burst out noisily about three minutes after everybody else.

Cyprien at last became indignant at the dead set thus made against the unfortunate Li, and told Pantalacci that he ought to be ashamed of himself. The Neapolitan would probably have made some insolent rejoinder, but a word from Steel put a sudden check on him.

"No," said the Lancashire man, regretting that he had laughed with the others, "it isn't fair play to keep on like that at a chap who doesn't even understand your lingo."

Here the matter dropped for a time. But a few minutes after, Cyprien was surprised to see the quietly ironical look of thanks with which the Chinaman regarded him, and

which made him think that Li knew rather more English than he gave him credit for.

But it was in vain that at the next halt he tried to engage the Chinaman in conversation. Li remained mute and impassible. Henceforward the young engineer looked upon him as an enigma whose key might be found with perseverance, and made a constant study of the smooth yellow face, the mouth like a sword-cut opening on to the row of very white teeth, the short, broad nose, the large forehead, and the slanting eyes, always cast down, as if to hide the latent malice in their look.

What age was Li? Fifteen or sixty? Impossible to say. If his teeth, his eyes, and his hair, black as soot, made him look quite young, the wrinkles in his forehead, his cheeks, and even around his mouth, gave him the appearance of an old man. He was short and of slight active build, and seemed to be rather a good sort of fellow than otherwise.

Was he rich or poor? Another dubious question! His gray trousers, yellow blouse, plaited string hat, felt-soled shoes, and stockings of immaculate whiteness, might have belonged to a mandarin of the first class or to a man of the people. His luggage consisted of a solitary red box with an address in black ink,—

"H. Li,
"From Canton to the Cape."

The Chinaman was the very pattern of neatness, never smoked, nor drank anything but water, and took advantage of every halt to carefully shave his head. Cyprien found he could make nothing of him, and soon gave him up as a mystery.

The days went by, and the miles were slowly rolled off. Sometimes the horses would cover the ground in fine style, at others it seemed impossible to move them. Little by little the journey was completed, and one fine day the coach reached Hopetown. Another long spell and then Kimberley was passed. Then a few wooden huts appeared on the horizon. It was New Rush.

There the diggers' camp differed but little from the temporary towns which spring from the ground, as if by enchantment. in all new countries—wooden huts of no

great size and roughly built, a few tents, a dozen coffee bars or canteens, an alhambra or dancing-saloon, several "stores," and the usual johnny-all-sorts shops.

In the shops were clothes and furniture, boots and glasses, books and saddles, weapons and drapery, brushes and brocms, blankets and cigars, green vegetables and patent medicines, wheel plows and toilet soaps, hair-combs and condensed milk, frying-pans and cheap lithographs—everything, in short, but buyers.

For the whole population of the camp was now at work at the mine, which is about a quarter of a mile from New Rush.

Cyprien, like the other fresh arrivals, hastened off thither, while dinner was being got ready at the Continental Hotel.

It was about six o'clock in the afternoon. Already the sun had begun to veil the horizon in a thin cloud of gold. Once again the engineer noticed the enormous apparent diameter assumed by the sun as well as the moon in these latitudes, a phenomenon of which no sufficient explanation has yet been advanced—the said diameter being about double as large as in Europe.

But a spectacle of much greater novelty for Cyprien awaited him at the Kopje, that is to say, at the diamond diggings. Before the opening of the works the site of the mine was an elliptical knoll, the only elevation in a plain as level as the sea. But now an immense gap with sloping sides, a sort of circus, oval in form and about forty yards across, had taken the place of the hill. The surface was cut up into three or four hundred "claims," or concessions, each thirty-one feet long.

The ground, consisting chiefly of reddish sand and gravel, was being excavated by pickaxe and spade, and sent to the surface. Thence it was taken to the sorting-tables, to be washed, crushed, sifted, and, finally, examined with extreme care to see if it contained any of the precious stones.

The claims, having been excavated independently of each other, formed ditches of varying depths. Some went down for a hundred yards or more, others for thirty, twenty, or even fifteen. To give room for working and intercommunication, each holder is officially required to

leave untouched on one of the sides of his claim a space of seven feet. This space, with that left by his neighbor, serves as a sort of gangway or embankment flush with the original level of the ground. On it joists are placed so as to overhang the claims for about a yard on each side, and by this means sufficient width is obtained to allow a couple of carts to pass abreast.

Unfortunately for the solidity of this hanging way and the safety of the miners, the holders of the claims gradually work in as the wall goes down, and as in some cases the depth is two or three hundred feet, the result is that the partition becomes a reversed pyramid, standing on its apex. The consequences can be guessed. The walls fall in, particularly during the rainy season, when, owing to the abrupt changes of temperature, the surface is seamed with cracks, and the sides split off along them. Nevertheless, the periodic recurrence of these disasters has no effect on the miners, and they persist in excavating their claims up to the very farthest limit of the dividing line.

As Cyprien approached the mine, he could see nothing but the carts moving about on the hanging roads; but when he had got near enough to peer into the depths of the curious quarry, he beheld a busy crowd of diggers of every nation, every color, and every costume at work in the claims. Negroes and whites, Europeans and Africans, Mongols and Celts—most of them in a state of semi-nudity, or wearing cotton drawers, flannel shirts, and straw hats, decked in many instances with ostrich plumes.

All were engaged in throwing the soil into leather buckets and sending them to the bank along wire ropes by means of cowskin halliards working over drums of open woodwork. There the buckets were emptied into the carts, and then sent down to the bottom of the claim to be returned with a fresh load.

These long iron ropes, stretched diagonally across the rectangular chasms, give a peculiar look to all dry diggings or diamond mines, and resemble the threads of a gigantic spider's web, whose weaving has been suddenly interrupted.

For some time Cyprien amused himself with contemplating this human ant-hill. Then he returned to New Rush, where the dinner-bell rang almost immediately after

his arrival. There during the evening he had the pleasure of hearing of the wonderful finds that had been made, of miners poor as Job suddenly becoming rich men by finding a solitary diamond, of others ever down on their luck, of the greed of the brokers, of the dishonesty of the Kaffirs employed in the mines, who stole the best stones, and of many other technical matters. The talk was of nothing but diamonds, carats, and hundreds of pounds.

Every one seemed the picture of misery, and instead of the happy digger noisily calling for his champagne to wet his luck, there were a dozen lanky, long-faced fellows drinking nothing but small beer.

Occasionally a stone would be passed around the table to be weighed, examined, valued, and returned to its owner's belt. That dull grayish pebble, with no more sparkle than a fragment of quartz rolled in a torrent, was a diamond in its gangue!

At night the coffee bars filled, and the same conversation, the same discussion which had occupied the dinner-hour, began again.

Cyprien went to bed early in the tent next to the hotel which had been assigned to him. There he soon fell asleep, despite the noise of a ball in the open air among the Kaffir diggers close by, and the piercing brays of a B-flat cornet from a neighboring dancing-saloon, in which the whites were amusing themselves with a few energetic lessons in choregraphy.

CHAPTER III

A LITTLE SCIENCE

To his honor, be it said, the young engineer had not come to Griqualand to spend his time in an atmosphere of greed, drunkenness, and tobacco smoke. His object was to make sundry topographical and geological surveys of certain parts of the country, to collect specimens of the rocks and diamantiferous gravels, and to conduct a few delicate analyses on the spot. His first care, therefore, was to procure a quiet dwelling-place, where he could set up his laboratory, and which would serve as the center of his explorations in the mining districts.

The knoll on which Watkins' Farm was situated soon attracted his attention as a site particularly favorable for his work, far enough away to suffer but little from the noisy proximity of the camp, and at the same time within an hour's walk of the farthest kopjes, for the diamond field is not more than ten miles in circumference. And so it happened that in the course of a single afternoon he had selected one of the houses abandoned by Mr. Watkins, agreed to take it, and installed himself therein. The farmer was most agreeable. At heart he was thoroughly tired of being alone, and highly pleased to find a young man anxious to take up his quarters close by, and break into the wearisome monotony.

But if Mr. Watkins expected to find in his tenant a mere table-companion or a partner in his assaults on the gin-bottle, he was very much mistaken. Almost before he had taken up his quarters with his retorts, furnaces, and reagents, almost before the chief articles of his laboratory had arrived, he was out on his geological excursions. Coming home in the evening nearly knocked up with fatigue, with rock specimens in his satchel, in his pockets, and even in his hat, he had much more inclination to go to sleep than to listen to the sub-fossil yarns of Mr. Watkins. Besides, he smoked very little, and drank much less; and take him altogether, he was hardly the jolly companion that the farmer had anticipated.

Nevertheless, Cyprien was so straightforward and considerate, so simple in his manner and speech, so well informed and so modest, that it was impossible to meet him frequently without liking him. And Mr. Watkins soon held him in more respect than any other man he knew.

"If he only knew how to drink! But what are you to do with a man who will not touch the least drop of gin?" Thus did the farmer conclude his frequent disquisition on his tenant's merits.

Miss Watkins, for her part, found herself suddenly placed on a footing of unrestrained friendship with the young scientist. Finding in him a distinction of manner, an intellectual superiority which she had hardly met with before in her usual circle, she had taken advantage of the unexpected opportunity to complete experimentally the

varied chemical knowledge she had obtained by reading scientific works.

The young engineer's laboratory, with its strange-looking apparatus, interested her greatly. She was above all things anxious to learn what she could about the nature of the diamond, that precious stone which played so important a part in the conversation and commerce of the country. In fact, Alice had almost come to look upon the gem as a worthless pebble. Cyprien, she could not but see, held much the same opinion on the subject as she did, and this community of sentiment had had no little influence on the friendship which speedily grew up between them. We may say without fear of contradiction that these two were alone in Griqualand in thinking that the sole object of life did *not* consist in finding, cutting, and selling the little stones so keenly coveted among the nations of the earth.

"The diamond," said Cyprien to her on one occasion, "is only pure carbon. It is a fragment of crystallized coal; nothing more. You can burn it like a lump of coke, and it was its property of combustion that first led to the knowledge of its real nature. Newton, who observed so many things, noticed that the diamond refracted light more than any other transparent body; and as he knew that this property belonged to most combustibles, he, with his usual boldness, deducted from the fact the conclusion that the diamond ought to be combustible. And experience proved that he was right."

"But, Mr. Cyprien, if the diamond is only carbon, why does it fetch such a price?" asked Alice.

"Because of its rarity," answered Cyprien, "and because it has only as yet been found in small quantities. For a long time it came only from India, Brazil, and Borneo. And surely you can remember, when you were about seven or eight years old, how it was first discovered in South Africa."

"Oh, yes! I remember!" said Miss Watkins. "Everybody seemed to go mad in Griqualand! There was nothing to be seen but people with pickaxes and shovels prospecting all over the place, changing the courses of the streams to examine their beds, and dreaming and speaking of nothing but diamonds. Young as I was, I can assure you that I

was quite weary of it at times. But you say that the diamond is dear because it is rare. Is that its only merit?"

"Not entirely. Its transparency, its brilliancy when it has been cut so as to refract the light, even the difficulty of this cutting, and its extreme hardness, make it a very interesting body for the scientist, and, I should add, very useful in the arts. You know it can only be polished with its own dust, and that it is its peculiar hardness which has caused it to be used for many years for rock-boring purposes. Without its help, not only would it be very difficult to work in glass and other hard substances, but the boring of tunnels, mine-galleries, and deep wells would be much more difficult."

"I understand now," said Alice, who began to have a slight respect for the poor diamonds she had hitherto so despised. "But, Mr. Cyprien, this carbon, of which you say the diamond is composed, in a crystalline state—that is right, isn't it?—this carbon, what is it?"

"A simple body, not a metal, and one of the most widely distributed bodies in nature," answered Cyrien. "All organic matter without exception possesses it. Wood, meat, bread, vegetables, etc., all have it among their constituents!"

"How strange!" said Miss Watkins. "To think that those bushes, the grass, the tree, the flesh of my ostrich Dada, and my own, and yours, Mr. Cyprien, are all partly made of carbon—like diamonds! Is everything carbon in this world?"

"Well, some people have been suspecting something of the sort for a considerable time. And contemporary science is making rapid advances toward some such solution. That is to say, the tendency is to reduce the number of simple bodies, and prove many of the old elements to be mere compounds. The spectroscope has lately thrown quite a new light on chemistry, and the sixty-two substances classed hitherto as elements would seem to be but forms of one—hydrogen perhaps—under different electric, dynamic, and calorific forms."

"Oh! you frighten me, Mr. Cyprien, with your long words," said Miss Watkins. "Let us only talk about carbon. Why do not you chemists crystallize it as you did the sulphur in those pretty needles the other day? It

would be so much more convenient, surely, than having to dig among the rocks to find it."

"People have often tried to do so," replied Cyprien, "and attempted the manufacture of diamonds by the crystallization of pure carbon, and to a certain extent have succeeded. Despretz in 1883, and quite recently in England another experimenter, have produced diamond dust by employing a strong electric current in vacuo to act on carbon cylinders free from mineral substances, and prepared with sugar-candy. But up to the present, the problem has not met with solution that would bring it into trade. Notwithstanding, it may be only a question of time. Any day, perhaps at this very moment, the method of making diamonds may be discovered."

It was thus they talked as they strolled along the sandy terrace which extended by the farm, or, seated under the veranda, watched the stars twinkling in the southern sky.

Sometimes Alice would leave the engineer and return to the house, at others she would take him to visit her flock of ostriches, kept in an enclosure at the foot of the knoll on which Watkins' Farm was situated. Their small, white heads craning over their black bodies, and the bunches of yellowish feathers ornamenting their wings and tails, interested the young lady, who for a year or more had kept quite a poultry-yard full of the giants.

Ostriches are very seldom tamed, and the Cape farmers leave them in a half wild state, parked in an enclosure of vast extent, surrounded by wire fencing like that in many countries running alongside the railroad. There they live all the year around in a captivity they know not of, feeding on what they can find, and seeking quiet corners wherein to deposit their eggs, which very strict laws protect against marauders. It is only at moulting time, when they throw off the feathers so much in request by the ladies of Europe, that the beaters drive them into a series of enclosures, diminishing in size, until the birds can be easily seized and made to give up their plumage.

This industry has been thriving at the Cape for many years. Every ostrich reduced to slavery brings to his proprietor without further expense a revenue of from eight to twelve pounds, nothing very extraordinary when it is remembered that a large feather of good quality will fetch

from two to three pounds, and that even the medium and smallest feathers are of considerable value.

But it was only for her private amusement that Miss Watkins had made pets of a dozen of these huge birds. It pleased her to see them with their eggs, and come up with their chickens to be fed as if they were fowls or turkeys. Cyprien often accompanied her to the ostrich-yard, and amused himself by stroking the best-looking of the lot, a certain black-headed ostrich with golden eyes—that very Dada who had swallowed the ivory ball which Alice used for darning on.

Little by little there had grown up in Cyprien a feeling of much depth and tenderness toward the young lady. He had persuaded himself that never would he find a companion more simple-hearted, more intelligent, more amiable, or more accomplished in every way to share his life of labor and meditation. In fact, Miss Watkins, having lost her mother very early, had been obliged to take charge of her father's house, and was an accomplished housewife, at the same time a true woman of the world. It was this curious mixture of perfect refinement and attractive simplicity that made her so charming. Having none of the silly scruples of so many of the young ladies of Europe, she was never afraid of soiling her white hands in the paste for the pudding, or of superintending the dinner, or keeping the linen in proper repair. And all this did not hinder her from playing Beethoven's sonatas as well as, and perhaps better than, most people, from speaking two or three languages, from taking pleasure in reading, from appreciating the masterpieces in literature, and, finally, from being eminently successful at the little weekly assemblies among the rich farmers of the district.

Cyprien had seen all this, and now, alas, great was the fall in his hopes. For the first time he saw the almost impassable gulf which separated him from Alice, and heavy was his heart as he returned from the decisive interview. But he was not the man to give up to despair. He was resolved to fight his way in the world, and in his work he had a sure solace for his grief.

Taking his seat at the small table, he finished, in a quick, firm hand, the long, confidential letter which he had begun

in the morning to his revered master, Mr. J——, a member of the Academy of Sciences, and titular professor at the School of Mines.

"One thing," he wrote, "I thought better not to put in my official memoir, because it is as yet only a hypothesis, and that is, the opinion I have been led by my geological researches to entertain on the subject of the diamond's formation. Neither the hypothesis that assumes it to be of volcanic origin, nor that which attributes its appearance in the beds to violent disturbances satisfies me any more than it does you, my dear master, and I need not repeat the reasons which led us to abandon it. The formation of the diamond in situ by the action of fire is likewise too vague an explanation to satisfy me. What was the nature of this fire? and why did it not affect the limestones of all kinds which are invariably met with in diamantiferous deposits? The idea seems to me quite childish, and on a par with the theories of the vortices and hooked atoms.

"The only explanation which satisfies me, if not entirely, at least in a certain degree, is that of the transportation by water of the gem's elements, and the subsequent formation of the crystal in position. I have been much struck with the peculiar outline, almost identical in all cases, of the different beds which I have noted and measured with great care. All more or less are in the general form of a basin, or rather, considering the shape of the overlying strata, that of a hunting-flask on its side. This appears to have been a reservoir of from thirty to forty thousand cubic yards in extent, in which there has been a deposit of sandy conglomerate, of mud, and of alluvial earth laid down on the older rocks. This character is very marked at Vandergaart Kopje, one of the most recently discovered of the diggings, and, which belongs, by the way, to the owner of the house in which I am writing.

"When a liquid containing bodies in suspension is poured into a cup, what happens? The bodies arrange themselves at the bottom of the cup or around its sides. That is exactly what has happened in this kopje. It is at the bottom and in the center of the basin as well as around the outer edges that the diamonds are met with. And this is so well understood that the claims between rapidly fall

to a lower value, while the central concessions or those bordering on the boundary enormously increase as soon as the shape of the deposit is made out.

"Besides, several circumstances that you find mentioned in my memoir tend to show the formation of the crystal in position rather than its transport thither in a perfect state. To mention only two or three, diamonds are nearly always found in groups of the same kind and color, which would hardly be the case had they been formed afar and brought thither by a torrent. Frequently two are found together, united but detachable at the least blow. How could they have resisted the grinding and jarring if brought down by water? Again, the larger diamonds are always found under the shelter of a rock, which seems to show that the influence of the rock—its radiation of heat, if nothing else—has helped on the crystallization. It is rare —very rare—that large and small diamonds are found together. Whenever a large specimen is discovered, it is almost always isolated. It is as if all the adamantine elements in the depression had been concentrated into a single crystal under the influence of special causes.

"These and many other reasons urge me to think that the diamond is formed in position, and that the elements of crystallization were brought down to the spot by water.

"But whence came the waters which bore down the organic detritus destined to be formed into diamonds? This I have not yet been able to determine in spite of my careful study of the district.

"The determination, however, may prove of some value. If we can find the route taken by the streams, why should we not, in tracing it up, arrive at the starting-point whence came the diamonds? and there we should doubtless find them in large numbers compared to that in the beds at present worked. It would be a complete demonstration of my theory, and one that I should be very glad to make. But it will not be my lot to do so, as I have nearly completed the period for which I was sent out. I have been more successful in my analysis of the rocks—" and the young engineer, continuing his story, plunged into technical details, which, though doubtless of much interest to himself and his correspondent, are hardly likely to

please the uninitiated reader. As soon as he had finished his long letter, Cyprien extinguished his lamp, stretched himself in his hammock, and slept the sleep of the just.

Work had driven out grief—at least, for an hour or so—but a pleasing vision haunted the young student's dream, and seemed to whisper that there yet was hope.

CHAPTER IV

VANDERGAART KOPJE

"I MUST be off," said Cyprien, as he dressed himself next morning. "I must leave Griqualand. After what that man said to me, to remain here a day would be weakness. He won't give me his daughter? Perhaps he is right. Anyhow, it will never do to look as if I wanted to plead extenuating circumstances. I must accept the verdict like a man, however painful it may be, and trust to the future to set things right."

And without further hesitation he began to stow away the apparatus in the packing-cases, which had served him for tables and cupboards. He worked with a will for an hour or so, and then through the open window came a sweet, girlish voice, clear and full as the voice of the skylark:—

'Tis the last rose of summer
Left blooming alone;
All her lovely companions
Are faded and gone.

He ran to the window and saw Alice on her way to the ostriches, with her apron full of scraps for their food. She it was, who was singing to the rising sun.

The young engineer was not particularly susceptible to poetical influences, but something in the song affected him deeply. He stood still at the window and listened intently.

The song ceased. Miss Watkins began to feed the ostriches, and as she did so it was pleasant to see the birds craning their long necks and dodging their huge

awkward heads in front of her hand as she tantalizingly held out and withdrew the morsels of food. Then she finished her task, and as she returned resumed her song.

Cyprien was standing in the same place, with tears welling up into his eyes, as if under a charm.

The voice grew more distant. Alice was within twenty yards of the farm, when the sound of hurried footsteps caused her to pause and turn around.

Cyprien, by an irresistible impulse, had left his hut, and was running after her bare-headed.

"Miss Watkins."

"Mr. Cyprien."

They were face to face in the full glow of the rising sun on the path that bordered the farm. Their shadows were thrown sharp and clear on the white wood of the palings. And now that Cyprien had reached Miss Watkins, he seemed astonished at what he had done and undecided what to say.

"You have something to say to me, Mr. Cyprien?" asked the lady anxiously.

"I have come to bid you good-bye. I am going away today," was the answer.

The delicate rose tint which gave the life to Alice's face suddenly disappeared.

"Going away! You are going away? Where?" she asked tremblingly.

"Home—to France," replied Cyprien. "My work is done here. My mission has ended. I have nothing else to do in Griqualand. And I am obliged to get back to Paris." This with a pause between each sentence, and as if he were craving pardon for some crime.

The girl was astounded. The news fell on her like a blow from a crowbar. Suddenly the teardrops showed themselves, and hung suspended on the long lashes which shaded her eyes. And then, as if recalled to the reality of the scene, she recovered herself, and said, with a slight smile, "Going away! And you are going to run away from your scholar before she has finished her chemistry? You are going to leave me in oxygen and those mysteries of azote which were always a dead-letter for me? It is hardly the correct thing, sir."

She tried to put a good face on it, and to laugh it off,

but the tone of her voice belied her words. Beneath her jesting there was a deep reproach which went straight to the young man's heart. She continued, but the jesting tone was gone. "And I? Do you think I am nothing? You quietly drop me back into chaos! You come here that I may see among all these Boers and greedy diggers a superior privileged being, learned, proud, disinterested, apart from the rest! you make me help you in your study and work! you open your heart to me, and make me share your hopes, your literary preferences, and your artistic tastes! you reveal to me the distance between a thinker such as you and the mere bimana that surround me! you encourage me to admire you and to like you! you nearly succeeded in doing so! Then you come and coolly tell me that it is all over, that you are off to Paris, and are in a hurry to forget me! And you think I am going to take it all as coolly as if I were a philosopher!"

Yes, he had done all that Alice with her tearful eyes had reproached him with.

He was just about to say in defense, "It is necessary that I do so! I yesterday asked your father to allow me to ask you to be my wife! He has refused, and gives me no hope! Now do you understand why I am going?" Then the thought of his promise crossed his mind. He had promised John Watkins never to speak to his daughter on the subject of his dream, and he judged it dishonorable to break his word.

But at the same time he felt that his idea of immediate departure was brutally unkind. It seemed to him impossible to thus suddenly abandon the girl he loved, and who evidently—there could be no doubt of it—loved him. At first the thought of delay frightened him, then it seemed to him as imperatively necessary.

"When I spoke of going away, Miss Watkins," at last he said, "I did not mean this morning—nor today—nor—I have a few more notes to make—preparations to finish—Anyhow, I shall have the pleasure of seeing you again and —talking with you about—about—your studies!"

And then Cyprien abruptly turned away and ran off like a lunatic. He rushed into his hut, and throwing himself into an arm-chair, was immediately deep in thought.

And his thoughts were somewhat different from what they were before he spoke to Miss Watkins.

"Give her up because I have got no money!" he said to himself. "Knock under at the first blow! Is that the sort of man I am? Would it not be better to sacrifice a few prejudices and try and make myself worthy of her? How many fellows make their fortunes in a few months on the Diamond Fields? Why shouldn't I turn up a hundred carat diamond as the others have done; or better still, find a new field? Surely I have more theoretical and practical knowledge than most of these men. Why should not knowledge give me what work and luck give them? After all, I risk little in having a try. Even from this standpoint of my mission it would not do me any harm to take a turn with shovel and pick and gain some practical experience as a digger. And, if I succeed; if I become rich in this primitive way, who knows but what Watkins may yield, and reverse his decision? The prize is well worth the trial!"

And Cyprien began to walk up and down the laboratory, but his hands were still, his brain only was at work. Suddenly he stopped, put on his hat, and walked out. He took the path down to the flat, and at a great pace set out for Vandergaart Kopje. In less than an hour he was there.

The miners were recrowding into the camp after their breakfast. Cyprien, as the bronzed visages passed by, was wondering to whom to apply for the information he wanted, when he recognized in one of the groups the honest face of Thomas Steel, the Lancashire miner. Two or three times had he met him since his arrival in Griqualand, and found that he was prospering, a fact sufficiently shown by his contented features, his brand-new clothes, and the large leather belt around his waist. Cyprien made up his mind to accost him and tell him of his intention.

"Buy a claim? Nothing easier if you have got the money!" answered the miner. "There is one now close to mine. Four hundred pounds! It is giving it away! With half a dozen niggers to work for you, you'll make thirty pounds a week."

"But I haven't got four hundred pounds, and I don't possess a nigger!"

"Well, buy a share in a claim—an eighth or a six-

teenth—and work it yourself! You can get one for forty pounds."

"That is more my figure," answered the engineer; "but you, Mr. Steel, how have you done, if I may be allowed to ask? Did you have any capital?"

"I got here with my arms and three sovereigns in my pocket," replied the Lancashire lad; "but I was lucky. I first worked half-shares with a man who had an eighth. The fellow liked hanging about the liquor-shop better than working, and so we halved. I made some excellent finds, one a five-carat stone that we sold for two hundred pounds! Then I left off working for the first cove and bought a sixteenth for myself. As I only found small stones I got clear of that in ten days and went halves with an Australian on his claim. But we have hardly made a fiver this first week."

"If I found a share in a good claim that would not cost too much, will you go partners with me and work it?" asked the engineer.

"If you like," answered Steel; "but on one condition. That is, we each keep what we find. Not that I mistrust you, Mr. Cyprien. But you see, since I have been here I always lose when the sharing comes, for I am a good hand at the pickaxe and shovel, and I do about three times the work of the other fellows!"

"That seems fair enough," said Cyprien.

"Well, then here's an idea, perhaps a good 'un. Let us two take one of John Watkins' claims."

"One of his claims? I thought all the kopje belonged to him."

"So it does, but the Colonial Government, you know, lays hold of it as soon as it is declared a diamond field. The Government looks after it, measures it out, cuts up the claims, and keeps the best part of the price, and pays only a fixed royalty. And the royalty, when the kopje is as large as this one, amounts to something. But the freeholder always has the preference in buying back as many claims as he can work. That is the case with Watkins. He has got several going besides his property in the kopje. But he cannot work them as he ought to, for the gout stops him from coming down here, and I think he would let you have one cheap if you made an offer."

"I would rather you do the bargaining," said Cyprien.

"It makes no difference to me," replied Steel. "Just as you like."

Three hours later half-claim No. 942, duly marked out with stakes and identified on the plan, was handed over to Messrs. Cyprien and Steel for the sum of ninety pounds. It was expressly stipulated in the deed that the concessionaries should share the profits with John Watkins, and as a royalty hand him over the three first diamonds weighing more than ten carats that they should find. There was nothing to show that such a find was likely to be made, but still it was possible—everything was possible.

On the whole the bargain was a good one for Cyprien, and Watkins, with his customary frankness, told him so as he signed the contract.

"You have acted like a sensible chap," said he, as he tapped Cyprien on the shoulder. "There is some stuff in you. I shouldn't be surprised if you turn out one of the luckiest diggers in Griqualand."

Cyprien could not but see in these words a happy augury for the future.

And Miss Watkins, who was present at the interview, had she a look bright as sunshine in her blue eyes? No! Seemingly she had been crying all the morning.

By tacit consent nothing was said about the meeting early in the day. Cyprien was going to stay, that was evident.

The young engineer left with a light heart, and having made up his mind to visit the farm for the future only in his leisure moments, set to work to pack up a few of his things and take them down to his tent at Vandergaart Kopje.

CHAPTER V

THE DIGGERS AT WORK

THE next morning the two partners set to work. Their claim was near the boundary of the kopje, and, if Cyprien's theory was correct, ought to prove a very rich one. Unfortunately the claim had already been overhauled, and

had been driven down into for a hundred and fifty feet or more.

In one respect this was an advantage, as its owners, by finding themselves below the level of the neighboring claims, were entitled, by the custom of the country, to all the earth and all the diamonds that fell into it.

The proceedings were very simple. By means of the shovel and pickaxe the two men cut away a certain quantity of earth from the mass. That done one of them went to the surface, and hauled up along the wire rope the bucketfuls sent him from below.

This earth was then taken in a cart to Steel's hut, and there, after being crushed with wooden billets, so as to clear away the worthless pebbles, was passed through a fine sieve and separated from the tiniest stones, which were all carefully picked over before being rejected. Then the earth was sifted through a still finer sieve to get rid of the dust, and then it was in a fit condition to be looked over for the diamonds.

When it had been turned out on to the table, the two diggers sat down, and, armed with a sort of scraper made out of a piece of tin, went over it carefully, handful by handful, and then threw it under the table, whence, when the examination was over, it was taken and thrown away as rubbish.

All this was to find out if it contained any diamonds, no matter how small. The partners thought themselves very lucky when the day had gone if they had found but one solitary specimen. They worked with great eagerness, and minutely tried through the earth, but during the earlier days the results were almost negative.

Cyprien seemed to stand no chance whatever. If a tiny diamond was found in the earth it was always Steel who noticed it. The first one he found did not weigh, gangue and all, more than the sixth of a carat.

The carat is a weight of four grains. A diamond of the first water—that is to say, pure, limpid, and colorless—is worth, once it is cut, about ten pounds if it weighs a carat. But if smaller, diamonds are very much less valuable in proportion. Larger ones increase in value at a very rapid rate. Generally speaking, a stone of pure water is equal to the square of its weight in carats multiplied by the

current price per carat. Thus if the price per carat is ten pounds, a stone of the same quality weighing ten carats would be worth a thousand pounds.

But stones of ten carats, and even of one carat, are very rare, and that is why they are so dear. And, besides, the Griqualand diamonds are nearly always yellowish in color, and that greatly detracts from their value in jewelry.

The finding of a stone weighing the sixth of a carat after seven or eight days' work, was a very poor return for the trouble it had cost. At that rate it would pay better to go out and dig, to look after sheep, or to break stones on the road. So thought Cyprien to himself. But the hope of coming across a splendid diamond, which would pay them at one stroke for the work of many weeks, or perhaps of many months, sustained him as it sustained all the other miners, even those least sanguine. Steel worked like a machine, and did not think at all—at least, he did not seem to do so.

The partners generally breakfasted together, contenting themselves with sandwiches brought from a bar close by; but they dined at one of the numerous ordinaries, like the rest of those in camp. The evenings they spent apart, Cyprien generally visiting the farm for an hour or two.

There he frequently had the disagreeable necessity of meeting his rival, James Hilton, a large man with red hair and freckled face. This rival was evidently making great progress in the esteem of John Watkins by dint of drinking more gin and smoking more tobacco than he did himself.

Alice, it is true, seemed to have the most perfect contempt for the clownish manners and commonplace conversation of young Hilton. But his presence was simply insupportable to Cyprien, who could not stand him at any price, and consequently took his departure, and left the field clear for him.

"The Frenchman is not satisfied!" Watkins would say to his companion, giving him a wink. "It seems that diamonds don't come by themselves into the shovel;" and Hilton would laugh loudly at the joke.

Often on these occasions Cyprien would finish his evenings with an old Boer living near the camp, whose name was Jacobus Vandergaart.

It was from him that the kopje took its name, for he had been the freeholder in the early days of the concession. But if he was to be believed, he was, by some gross piece of injustice, dispossessed in favor of Watkins. Now he was completely ruined, and lived in an old mud hut, earning a living by diamond-cutting—a trade he had formerly followed in his native town of Amsterdam.

It often happened that the diggers, curious to know the exact weights that their diamonds would be once they were cut, would bring them to him sometimes to cleave them, sometimes to submit them to more delicate operations. But this work required a sure hand and keen eyesight, and old Jacobus Vandergaart, excellent workman though he had been in his time, had now great trouble in executing his orders. Cyprien had given him his first diamond to mount in a ring, and had immediately taken a fancy to him. He liked to come and sit in his humble workshop and have a chat, sometimes even merely to keep him company while he worked at his lapidary's wheel. Jacobus Vandergaart, with his white beard, bald head, and black velvet cap, and long nose, surmounted by a pair of round spectacles, looked like an alchymist of the fifteenth century seated among his quaint old tools and acid flagons.

In a bowl on a bench near the window were the rough diamonds entrusted to Jacobus Vandergaart. Their value was something considerable. If he wished to cleave a specimen whose crystallization did not seem quite perfect he would begin by ascertaining by means of his magnifying-glass the direction of the cleavage planes. Then with a splinter of another diamond he would make an incision in the selected face, and then he would introduce a thin steel blade into this incision, and give it a sharp blow. In this way he would cleave the diamond's faces one after the other.

If Jacobus Vandergaart wished to "cut" a diamond, or, to speak more accurately, to shape it into some desired form, he would begin by drawing in chalk on the gangue the facets he had selected. Then he would place each of the faces in succession in contact with a second diamond, and then he would submit them both to prolonged friction.

The two stones would mutually grind away each other and gradually the facets would be formed.

In this way Vandergaart would give the gem one of the customary forms, all of which can be classified under three headings, "double-cut brilliants," "single-cut brilliants," and "rose diamonds."

A double brilliant has sixty-four facets, a "table," and a "pavilion."

A simple brilliant is just half a double brilliant.

A rose is flat below and has a faceted dome above.

Now and then Vandergaart had to cut a "briolette," that is, a diamond with neither top nor bottom, and shaped like a pear. In India briolettes have a hole bored through the narrow ends, and by it are threaded in strings.

"Pendants," which he very rarely had to cut, are half briolettes with table and pavilion and faceted on the inner side.

Once the diamond is cut, it has to be polished. This is done by means of a disk of steel or lead, about nine inches in diameter, spinning horizontally on a table at the rate of from two to three thousand revolutions per minute, and worked by a crank and fly-wheel. This disk is smeared with oil, and dusted over with diamond dust derived from previous cuttings, and against it Vandergaart would press the faces of his stone until they had acquired a perfect polish. The crank was worked sometimes by a little Hottentot boy, who was engaged by the day, sometimes by a friend like Cyprien, who was always very happy to oblige.

As the diamond-cutter worked he talked, and sometimes he would push his spectacles on to his forehead and stop short in his work to tell some story of the past. He had been forty years in South Africa, and knew nearly all its history, and what gave the charm to his conversation was that he spoke from personal experience, and honestly believed in the traditions and prejudices of his countrymen.

Often would he tell how in early days the colony had been captured by the British, and how the Boers, to avoid the restraints of laws to which they were unaccustomed, had moved farther and farther up the country. And he would enlarge on the perils and incidents of each exodus

as with wagons and cattle and all their belongings the Dutch settlers penetrated into Kaffirland in search of a new home. And many were the stories he would tell of the wars with the natives occasioned by these irruptions into the countries of the savage kings.

"At last," concluded he on one occasion, "I built this house where we are sitting, and started a farm. With me were my wife and two children. My kraal was on the site of the present mine. Ten years later John Watkins arrived in these parts and built his first house. We did not then know that there were diamonds in this country, and so little occasion had I for thirty years to think of my old trade that I had almost forgotten the existence of such gems.

"Suddenly, in 1867, diamonds were discovered, the first recognized, as you know, while it was being thrown about by a child to whom it had been given as a pretty pebble for a plaything. In 1870 I lost my wife and children, and almost alone in the country I remained quite indifferent to the fever raging around me. I worked away on my farm just as if the deposit Dutoit's Pan had been a thousand miles off instead of within musket-shot.

"One night I found the wall of my kraal had been knocked down and the boundary removed three hundred yards farther back. John Watkins, helped by a hundred Kaffirs, had built a wall joining on to his own so as to enclose a large patch of sandy, gravelly land, up to that moment always recognized as belonging to me.

"I complained to him. He only laughed. I threatened to go to law. He told me I might as soon as I liked.

"Three days later the mystery was solved. The patch of ground was a diamond mine. John Watkins had discovered it, and, hurrying off to Kimberley, had certified it as his own.

"I went to law, and you know what that means. One by one I lost my cattle, my horses, my sheep. I sold my furniture, I parted with everything. I lost my law-suit and I was ruined.

"The decision of the court was that I had made out no claim to the land in dispute, but that to avoid further trouble they would confirm me in possession of what I then held and certify the boundary. That boundary they

took as the twenty-fifth degree of east longitude. The land to the west of it was adjudged to John Watkins, that to the east to Jacobus Vandergaart.

"The mine was to the west of the line, and so, although it bears my name, it became the property of John Watkins."

CHAPTER VI
IN CAMP

THE subject of the conversation was not very agreeable to the young engineer. He scarcely liked to hear such imputations on the honor of the man whom he persisted in regarding as his future father-in-law. And so he came to consider Vandergaart's statements as merely the pleadings in his law-suit and therefore liable to considerable alteration when compared with those of the other side.

Watkins, to whom he one day spoke on the subject, burst into a shout of laughter, and as his only reply tapped his head with his finger, thereby intimating that Vandergaart was simply mad.

Was it not possible that the old man, under the excitement of the discovery of the mine, had imagined that it was his property on insufficient evidence? The court had evidently decided against him all through, and it would be very strange had they no cause for doing so. And so Cyprien continued his visits to Watkins Farm, although he knew what Vandergaart thought of its owner.

There was another man in the camp with whom Cyprien was on visiting terms. This was Mathys Pretorius, a name well known to all Griqualand miners.

Although only forty years old, Pretorius had for many years roamed about the great valley of the Orange before settling here. But this nomadic existence had not, as in Vandergaart's case, had the effect of souring him. On the contrary, he had grown good-humored, and so fat that he could scarcely walk. He was just like an elephant.

At home he was nearly always seated in a huge wooden chair, built specially to support his majestic form. Abroad he never went except in a carriage made of wickerwork,

and drawn by a gigantic ostrich. The ease with which the bird drew the huge mass after him was a striking demonstration of his muscular power.

Mathys Pretorius always came to the camp to arrange about the sale of his vegetables. He was very popular, although his popularity, being due to his extreme cowardice, was scarcely an enviable one. The miners amused themselves by endeavoring to frighten him with all sorts of fantastic rumors.

One day they would tell him of an inroad of the Basutos or the Zulus; another they would pretend to read in a newspaper that an act had been passed making it punishable for a man to weigh more than three hundred pounds; another they would declare that a mad dog had been reported on the Driesfontein road; and poor Pretorius, who was obliged to take that road home, would find a thousand excuses for remaining in camp.

But these imaginary alarms were nothing to his actual terror lest a diamond mine should be discovered on his estate. A horrible picture of the future presented itself to him—avaricious men invading his kitchen garden, upsetting his vegetable borders, and ending by turning him out and taking possession! For how could he help thinking that the fate of Jacobus Vandergaart would be his?

One of his most relentless persecutors was Annibale Pantalacci. This mischievous Italian—who seemed to prosper exceedingly, judging from his employing three Kaffirs on his claim, and sporting an enormous diamond on his shirt-front—had discovered the Boer's weakness, and at least once a week made it his business to go digging and pecking near Pretorius Farm. The farm lay along the left bank of the Vaal, about two miles above the camp, and consisted of alluvial land that might be diamantiferous, though nothing as yet had shown that it was so.

Pantalacci, entering thoroughly into the spirit of his cumbrous joke, would place himself full in view of the windows of the farm, often bringing with him a few companions to assist in the comedy. The portly farmer would be seen dodging behind his cotton curtains anxiously following all their gestures, ready to rush to the stable, hitch up his ostrich, and be off at the first sign of their success.

Why had he been foolish enough to tell one of his friends that he kept his ostrich harnessed night and day, and his carriage packed with provisions, ready to start at the first unmistakable symptom of invasion?

"I shall go up among the Bushmen, to the north of the Limpopo," he said. "Ten years ago I traded ivory with them, and I would a hundred times rather do that than remain among such a lot of lions and jackals as we have here!"

And the confidant—as is the custom of confidants—immediately hastened to make the confidence public, and Pantalacci seized the opportunity, to the great amusement of the miners.

Another constant victim of the same facetious individual was the Chinaman Li. Li had settled at Vandergaart Kopje, and opened a laundry. The mysterious red box contained nothing but brushes, soda, soap, and washing-blue. Such was all that an intelligent Chinaman required to make his fortune with in this country.

Cyprien could hardly help laughing when he met the ever-silent and uncommunicative Li carrying a large basketful of dirty clothes on their way to the wash. But what angered him was that Pantalacci's persecution of the unfortunate Celestial was absolutely cruel. He threw bottles of ink among the linen, stretched cords across the doorway so that Li tumbled over them, stuck him to his seat by a knife in the tail of his blouse, etc. Whenever he got a chance he would give him a sly kick, and call him a "pagan hound," and this he did invariably when he paid his weekly bill. Never was his washing done as he wished, although Li got it up most marvelously. For the least false fold he would fly into a most frightful rage and thrash the unhappy Chinee as if he were his slave.

Such were the ordinary "amusements" of the camp. Occasionally, however, they partook of a more tragic character. If, for instance, it happened that a negro employed in one of the mines was accused of stealing a diamond, the whole population turned out to escort him to the magistrate, and urged him along with their clenched fists. But the crime of receiving was held in greater detestation than that of stealing.

Ward, the Yankee. who arrived in Griqualand at the

same time as the young engineer, had some cruel experience of the consequence of buying diamonds from Kaffirs. By law, a Kaffir on the works is not allowed to possess diamonds, or to buy a claim, or work on his own account.

No sooner was it known what the Yankee had done than an excited crowd rushed to Ward's canteen, sacked it from top to bottom, set it on fire, and would have hanged the proprietor on the gallows that willing hands were preparing, had not a dozen of the mounted police opportunely arrived and marched him off to prison.

And such scenes of violence were frequent among this very mixed and half-savage population. Men of every race jostled each other in the incongruous crowd. The thirst for gold, the drunkenness, the torrid climate, the disappointments, and the dissipation combined to set their brains ablaze. Had all been lucky in their digging they would perhaps have been quieter and more patient. But for the one or two to whom the chance would come of finding a stone of great value there were hundreds who barely vegetated—who scarcely earned enough to keep themselves alive, even if they did not fall into absolute penury.

This Cyprien soon began to see, and he was asking himself if it were worth while or not to continue so unremunerative a trade when an opportunity offered for him to change his plan of operations.

One morning he found himself face to face with a dozen Kaffirs, who had arrived in camp in search of work. These men had come from the distant mountains that divide Kaffirland, properly so called, from the Basutos. For more than four hundred and fifty miles they had traveled in Indian file along the bank of the Orange, living on what they found on their way—roots, berries, and locusts. They were in a state of semi-starvation, and looked more like skeletons than living beings. With their emaciated limbs, long, naked bodies, parchment-like skins, bony sides, and hollow cheeks, they seemed more likely to devour a beefsteak of human flesh than to do a day's work. No one offered to engage them, and they remained squatted by the side of the road, helpless, gloomy, and brutalized by misery and want.

Cyprien was much affected at their appearance, and

took pity on them. He motioned them to wait a little, and then went off to the hotel, where he ordered a large potful of boiled maize-flour and some tins of preserved meat to be sent out, and then returned to amuse himself at seeing them enjoy these unaccustomed luxuries.

One would have thought they were shipwrecked sailors rescued from a raft after a fortnight's fasting. They ate so much that for their health's sake they had to be stopped to prevent their suffocation. Only one—the youngest and best-looking of the group—showed any signs of self-restraint, and—what was a still rarer thing for a Kaffir—he even went so far as to thank his benefactor. He stepped up to Cyprien, seized his hand, and solemnly passed it over his woolly head.

"What is your name?" asked Cyprien.

The Kaffir, understanding a few words of English, replied, "Mataki."

Cyprien liked his straightforward look, and conceived the idea of engaging him to work on his claim.

"After all," he said to himself, "it is what everybody does in these parts. Better for the Kaffir that he should have me for his master instead of some Pantalacci." And so—"Well, Mataki, you are looking for work, are you?"

The Kaffir nodded.

"Will you work for me? I will board you, find you in tools, and give you a pound a month."

Such was the customary rate, and Cyprien knew that he could not offer more without raising the whole camp against him. But he intended to make up the very poor pay with gifts of clothes, cooking utensils, and other things.

As his only reply, Mataki smiled, showed his white teeth, and again laid his protector's hand on his head.

The contract was signed.

Cyprien took him to his tent and gave him a flannel shirt, a pair of cotton trousers, and an old hat. Mataki could hardly believe his eyes. To see himself thus splendidly arrayed as soon as he arrived in camp surpassed his dreams. He knew not how to express his gratitude or his joy. He jumped and capered and laughed and cried again and again.

At the end of a week Mataki had picked up so many

words that he was able to make himself understood, and Cyprien learned his history. He did not know the name of the country where he was born, but it was in the mountains, toward the sun-rising. All he could say about it was that he was very miserable, and, like many other warriors of his tribe, to make his fortune he had come to the Diamond Fields.

What did he hope to gain? A red cloak and ten times ten pieces of silver! For the Kaffirs hate gold pieces, their prejudice against them being due to their having been used by the first European traders.

And what did Mataki, the ambitious, think of doing with these pieces of silver?

His intention was to get a red cloak, a gun, and ammunition, and then to return to his kraal. There he would buy a wife, who would work for him, take care of his cow, and cultivate his mealie-field. Then would he become a great chief. Every one would envy his gun and his good fortune, and he would die full of years and respected. Nothing could be simpler.

Cyprien remained deep in thought after hearing the simple program. Could he change it; enlarge the poor savage's horizon, and show him a better object in life than a red cloak and a shot-gun? Or should he leave him in his ignorance and let him return to his kraal in peace, and live the life he hoped for? A serious question, which the engineer dared not solve, but which Mataki did for himself.

For as soon as the Kaffir had picked up sufficient of the language to make himself understood, he betrayed an extraordinary thirst for information. His questions were incessant; he wished to know everything—the name of each object, its use, and its origin. Then he devoted himself to reading, writing, and to ciphering. In short, his thirst for knowledge was insatiable. And Cyprien encouraged him, and every evening gave him an hour's lesson to help him on the road he had chosen.

Miss Watkins was also interested in his unusual eagerness, and undertook to give him lessons. And these the young Kaffir would repeat to himself as he worked at the bottom of the claim, dealing mighty strokes with the pickaxe below, drawing the buckets up above, or sorting

out the pebbles at the sieves. So well did he work that his example was contagious, and the men on the neighboring claims made far more progress than they had ever done before.

On Mataki's recommendation, Cyprien engaged another Kaffir of the same tribe, whose name was Bardik, and his zeal and intelligence were equally appreciated.

Soon after Bardik's engagement, Cyprien had his first good find, a seven-carat stone, which he at once sold to Nathan, the broker, for twenty pounds. This was promising, and a miner who was only on the look-out for reasonable wages would have been content—but Cyprien was not.

"If I stay here for two or three months at this rate," he said to himself, "shall I be any better off? It is not one seven-carat stone that I want, but a thousand or two, or else Miss Watkins will be handed over to James Hilton, or some other worthless fellow."

Thus thought Cyprien as he returned to the kopje one sultry, dusty day—the dust, that reddish, blinding cloud, that hangs like a pall over the site of a diamond mine. Suddenly he stopped, and stepped back, horror-struck at what he saw in the yard of one of the isolated huts.

A man was hanging from the pole of an ox-cart, which had been drawn up by the wall. The body hung like a plummet against a background of snowy white linen—motionless, lifeless, with the feet stretched to the ground, and the arms dropped limply at its side.

Cyprien was for a moment aghast. But as he recognized the Chinaman Li, hanging by the pigtail, which had been hitched around his neck, his astonishment gave way to pity. He did not hesitate very long. He sprang to the pole, caught the body in his arms, and cut the tail with his pocket-knife. That done, he carefully laid his burden in the shadow of the hut.

It was time. Li was not quite cold. His heart beat feebly, but still it did beat. Soon he opened his eyes, and, strange to relate, seemed to come to his senses as soon as he saw the light. His impassible face betrayed neither fear nor astonishment at emerging from so horrible a trial. He seemed as though he had been awakened from some gentle sleep.

Cyprien made him drink a few drops of vinegar and water that he happened to have in his flask.

"Can you speak now?" asked he, mechanically, forgetting that Li could not understand him.

Li, however, gave an affirmative nod.

"Who hanged you, then?"

"I did," replied the Chinaman, as if he had said the most natural thing in the world.

"You? You were committing suicide, then, you scoundrel! And why?"

"Li was too warm! Li was tired of it!" replied the Celestial. And then he shut his eyes, as if to escape further questioning.

It now struck Cyprien for the first time that the Chinaman was not supposed to know the language.

"You speak English?" asked he.

"Yes," answered Li, lifting his eyelids, or rather the two oblique button-holes alongside his nose.

The look he gave reminded Cyprien of that ironical glance which had surprised him on the coach to Kimberley.

"Your reasons are absurd!" he said severely. "People do not commit suicide because the weather is too hot! Speak seriously. There is something in all this, I know. Has that Pantalacci been doing anything to you?"

The Chinaman bowed his head. "He threatened to cut off my pigtail," said he, in a low voice, "and I am sure that he would have done so in an hour or two."

At that moment Li perceived the very pigtail in Cyprien's hand, and saw that the misfortune he dreaded above all things had come to pass.

"Oh! sir! what! you! You cut it!" he screamed in terror.

"It was necessary to do so to prevent your being strangled," said Cyprien; "but it is of no consequence to you in this place. Be calm!"

The Chinaman seemed so broken-hearted at the amputation that Cyprien, fearing he might make another attempt on his life, took him along with him.

Li followed without a word, sat down near his rescuer, listened to his reprimands, promised never to renew the

attempt, and, under the influence of a cup of hot tea, even favored him with some scraps of his biography.

He was a native of Canton, and had been brought up in an English commercial house. From Canton he had gone to Ceylon, thence to Australia, and thence to South Africa. Fortune had never smiled on him. The laundry trade had been as unprofitable as the twenty other trades he had tried his hands at. But Pantalacci had simply rendered his life insupportable, and to escape his persecution he had made up his mind to hang himself.

Cyprien comforted the poor fellow, promised to protect him against the Neapolitan, gave him all the dirty clothes to wash that he could find, and sent him away contented at the loss of his capillary appendage, and free from superstition regarding the consequences.

CHAPTER VII

THE LANDSLIP

A FORTNIGHT passed, and Cyprien found not a single diamond. More and more did he become disgusted with his trade. It seemed to him, without capital enough to buy a first-class claim and pay a dozen Kaffirs to work it properly, but little better than a swindle.

One morning, while Mataki and Bardik went out with Steel to work, he stayed in his tent to answer a letter from Pharamond Barthes, which had been brought in by an ivory trader.

Barthes was enchanted with his life of hunting and adventure. He had already killed three lions, sixteen elephants, and an incalculable number of giraffes, antelopes, and such small game.

"Like the conquerors of history," he said, "we make war feed on war. It frequently happens that we not only feed the whole expedition on what we bag, but also make considerable profit by selling or bartering the skins and ivory." And in conclusion he said, "Why don't you come with me and have a turn on the Limpopo? I shall be there about the end of next month, and intend to go down to Delagoa Bay, to return by sea to Durban, whither I

have promised to take my Basutos. Leave your horrible Griqualand for a few weeks and join me."

Cyprien was reading the letter over again when a tremendous noise, followed by a loud shouting in the camp, made him rush out of his tent.

An excited crowd were running toward the diggings.

"A landslip!" was the cry from all sides.

The night had been very cold, while the preceding day had been one of the hottest for some time. This sudden change of temperature had, as usual, caused the earth to crack and break away. Cyprien hurried to the kopje. A glance showed him what had happened.

An enormous block of earth, about sixty yards high and two hundred long, had been cleft vertically, and a fissure formed in it like a breach in a rampart. Thousands of tons of gravel had been detached from the main mass and rolled down into the claims, filling them with sand, pebbles, and rubbish. Everything on the spot at the time—men, oxen, and carts—had been hurled below. Fortunately the majority of the diggers had not yet gone down to work, so that but a very few were buried by the fall.

Cyprien's first thought was for Steel, and soon he had the pleasure of recognizing him among the men near the cleft. He ran up to ask him how it had happened.

"We are all right," said the Lancashire man, as he shook hands.

"Where's Mataki?" asked Cyprien.

"He is down under there," answered Steel, pointing to the rubbish which had heaped up on their claim. "I was waiting here till he had filled his first bucket when the slip took place."

"But we cannot leave him there without trying to rescue him. Perhaps he is still alive."

Steel shook his head. "It is not likely that he can be living under fifteen or twenty tons of earth. Besides, it would take ten men two or three days to clear all that off."

"Never mind," answered the engineer; "it shall not be said that we left a fellow-creature down in that grave without trying to get him out."

And then, through Bardik, who was standing near, he

offered to the Kaffirs the high pay of five shillings a day to all who would help to clear out the claim.

Thirty negroes undertook the job, and without losing an instant set to work. Picks and shovels were there, buckets and ropes were ready, and the carts were standing by. A great number of the whites, hearing that they were trying to dig out a poor fellow buried alive by the landslip, volunteered their help, and Steel, thoroughly roused by Cyprien's energy, was by no means the least active among them.

By noon several tons of gravel had been cleared away. At three o'clock Bardik uttered a hoarse cry. Beneath his pickaxe he had just caught sight of a black head. The men worked with a will, and a few minutes later Mataki's body was exhumed. The unhappy man was lying on his back, motionless, and to all appearances dead. By a singular chance one of the leather buckets had been turned over on his face and covered it like a mask.

This Cyprien noticed at once, and it led him to think that he might recall the poor fellow to life. The hope, however, was very feeble, for the heart beat no longer, the skin was cold, the limbs had stiffened, the hands were clenched in agony, and the face—of that livid paleness peculiar to the negroes—was frightfully contracted by asphyxia.

Cyprien did not lose courage. He had Mataki carried to Steel's hut, which was nearer than his own, and here he was laid on the table where the gravel was usually tried over. Systematic rubbing was then begun, particularly that chafing the thoracic cage, with a view to establish artificial respiration, which is employed in the case of the apparently drowned. Cyprien knew that this treatment was equally applicable to all kinds of asphyxia, and in the present instance he had nothing else to attend to, as no wound or fracture, or even serious bruise, was apparent.

"Look!" said Steel, who was rubbing away assiduously; "he is holding something in his hand!"

The result of these measures soon became apparent. The corpse-like stiffness of the young Kaffir gradually relaxed; the temperature of the skin sensibly changed. Cyprien, who was watching the heart for the least sign of

life, thought he could feel a gentle trembling that augured well.

Soon the symptoms became more marked. The pulse began to beat, a slight inspiration seemed to insensibly inflate Mataki's chest, and then a stronger expiration betrayed a manifest return of the vital functions.

Suddenly two vigorous sneezes shook the black carcass from head to foot. Mataki opened his eyes, breathed, recovered his consciousness.

"Hurrah! hurrah! he's all right!" exclaimed Thomas Steel, as, dripping with perspiration, he suspended his rubbing. "But look! he has never let go of that piece of earth in his hand!"

Cyprien had other things to think of than such a trifle as that! He made his patient swallow a spoonful of spirits, and then raised him so as to facilitate his breathing. Finally, when he found he had really returned to life, he wrapped him up in blankets, and, with the help of three or four willing companions, carried him to his own hut at Watkins Farm.

There the poor Kaffir was put to bed, and Bardik made him take a mug of hot tea. In a quarter of an hour he peacefully fell asleep. He was saved!

Cyprien felt that incomparable gladness in his heart which a man experiences when he has snatched a human life from the jaws of death; and, sitting down by Mataki, took up a book, interrupting his reading from time to time to look at him as he slept—like a father watching the sleep of a convalescent son.

During the six weeks Mataki had been in his service Cyprien had had every reason to be satisfied with him. His intelligence, obedience, and ardor in his work were astonishing. He was fearless and obliging, and of a singularly quiet and cheerful disposition. He had, however, one fault—a very serious one—due evidently to his earlier education, and to the Spartan customs that prevailed in his father's kraal. Mataki was just a little of a thief, but almost unconsciously so. When he saw anything he liked he thought it the most natural thing in the world to annex it.

In vain his master, alarmed at the tendency, talked to him and argued with him. In vain he had threatened to

send him away if he found him out in another attempt. Mataki promised never to do so again, cried, begged pardon, and the very next day stole something else, as if nothing at all had happened.

His larcenies were not heavy, however. His covetousness was not excited by things of great value; a knife, a cravat, a pencil, or some such trifle would be enough for him. But Cyprien was none the less broken-hearted at finding such a failing in so sympathetic a nature.

"Wait! hope!" he said. "Perhaps I shall some day make him understand how wicked it is."

Toward nightfall Mataki awoke, as well as if nothing had happened, and then he told his story.

The bucket that had accidentally covered his face, and a long ladder serving as a buttress above him, had kept off the pressure, and saved him for some time from complete asphyxia by leaving him a little air to breathe. He had made the best he could of this fortunate circumstance by breathing only at long intervals. But little by little the air became foul. Mataki found his senses gradually going, and fell off into a deep, painless sleep, whence he roused for a moment now and then to make a determined attempt at inspiration. Then all was a blank.

Cyprien let him talk for a minute or two, and then got him to drink and eat, and compelled him, in spite of his protests, to remain in bed for the night. Then, feeling sure that all danger was over, he left him alone, and went to pay his customary visit to Watkins Farm.

He wished to tell Alice what he thought of the events of the day, and of the dislike he had taken to the mine—a dislike which the deplorable accident of the morning could not but increase. He told her of his disappointments and vexations, and of the letter he had received from Pharamond Barthes. Would it not be better for him to take his friend's advice? What would he lose by going to the Limpopo and trying his luck as a hunter? Surely it would be a nobler occupation than that of sifting the earth like a miser, or getting other people to sift it for him.

"What do you think, Miss Watkins?" he asked. "You have so much practical good sense, advise me. I have lost my moral equilibrium; I want a friendly hand to set me right again."

Thus spoke he in all sincerity, pleased, he knew not why, at thus betraying his indecision to his gentle confidante, who listened with deep sympathy.

"I have long thought the same of you," she answered. "I cannot understand how a scientific man like you can abandon yourself to such a life. Is it not a crime against yourself and against science itself? To give your precious time to mere hand labor, such as a Kaffir or a Hottentot could do much better, seems to me to waste it."

Cyprien had only one explanation to give of the problem which so greatly astonished and shocked the young lady. Perhaps she was exaggerating her indignation a little to force him to an avowal? But that avowal he had promised not to make, and so he restrained himself, although it trembled on his lips.

Miss Watkins continued, "If you want to find diamonds so badly, why don't you look where you are most likely to find them—in your crucible? What! you a chemist, knowing more than anybody what these wretched stones are which people value so highly, and set yourself to mere mechanical labor? If I were in your place I should try to make diamonds, not to find them!"

Unfortunately at this moment Watkins awoke from his sleep to ask the latest news from Vandergaart Kopje, but the seed had been thrown on good ground, and was sure to germinate.

As the young engineer returned home he pondered over Miss Watkins' thrilling words. All that was fanciful about them disappeared when he thought of the generous and almost tender confidence that they had showed in him.

"And why not?" he asked himself. "The fabrication of the diamond may have appeared Utopian a century ago, but now it is as good as done. Frémy and Peil have made rubies, emeralds, and sapphires which are only differently colored crystals of alumina. MacTear and Hannay, of Glasgow, really made diamonds, and their only fault was that they were so horribly dear—dearer than the natural diamonds of Brazil and Griqualand—and consequently the discovery was of no commercial value. But when the scientific solution of a problem has been arrived at, the industrial solution is not far off. Why should I not seek for it? The men who have failed hitherto have

been mere theorists—men of the study and the laboratory. They have not studied the diamond in position—in its native earth—in its cradle, so to speak. I have the benefit of their work—of their experience—in addition to my own. I have extracted the diamond with my own hands. I have analyzed it, studied it under every aspect in which it has been found. If anybody had a good chance of succeeding, I am the man—at least, I ought to be the man."

Thus thought Cyprien, as, turning the matter over in his mind, he lay awake during the greater part of the night.

His resolution was soon taken. On the following morning he told Steel that he did not intend to work his claim any more, and arranged with him to retire from the partnership as soon as some one could be found to take his place. Then he went back and shut himself up in his laboratory to think over his new scheme.

CHAPTER VIII

THE GREAT EXPERIMENT

"PERHAPS," said Cyprien, "these diamond deposits are really carbonataras. If a lot of hydrogen and carbon hung about the streams and alluvial deposits in the form of marsh gas, why should there not have been an oxydation of the hydrogen with an accompanying partial oxydation of the carbon, such as would bring about a crystallization of the carbon in excess?"

With this idea to begin with, a chemist had little difficulty in selecting a compound to play the part of the oxygen in an analogous but artificial reaction, and Cyprien immediately entered on the investigation.

In the first place a state of things had to be devised experimentally to resemble as much as possible the supposed conditions under which the natural diamond was produced. This was simple enough. Everything great in science and art is simple. What can be less complicated than the greatest discoveries of humanity—gravitation, the compass, the printing-press, the steam-engine, the electric telegraph?

Cyprien himself went down to the lowest depths of the diggings and there selected samples of the earth which he

thought best suited for his experiment. With it he made a thick pasty mortar, and with this he carefully lined a steel tube about half a yard long, two inches thick, and three inches in bore.

This tube was simply a piece of cannon condemned as unfit for service. He had managed to buy it at Kimberley from a company of volunteers who had been disbanded after a campaign against the neighboring Kaffirs. This cannon, sawed in segments in old Vandergaart's work-shop, gave the very instrument that was required—namely a chamber of sufficient resistance to support enormous internal pressure.

After firmly closing one end of the tube, he placed in it a few fragments of copper and about three pints of water. Then he filled it with marsh gas, and then carefully luting it with his mortar he drove stoppers into each end and fastened them in strongly enough to withstand any force. Thus was the apparatus constructed. The next thing to do was to submit it to intense heat.

To obtain this it was put into a large reverberating furnace kept going night and day for a fortnight, so as to give a constant white heat.

Both the furnace and the tube were then enveloped in a thick coating of refractory earth, so as to retain the greatest possible quantity of heat, and to cool down as slowly as possible when the time came. The furnace looked like a huge beehive or an Eskimo hut.

And now Mataki was able to be of use. All the preparations had been watched by him with great attention, and when he found that they were going to try and make a diamond his interest in the experiment became intense. He soon learned how to stoke the furnace, and the charge of that department was entrusted to him.

As can be imagined, these arrangements took some time. In a European laboratory the experiment would have been begun within a couple of hours of its having been planned out, but in this half-civilized place it took three weeks before all was ready. And Cyprien was very lucky in several things; for instance, in finding the old gun, which just suited him, and in procuring coal for fuel. In fact, so rare was coal at Kimberley that he had to apply to three merchants to scrape together a single ton.

At length all difficulties were surmounted, and once the fire was lighted, Mataki took it in charge.

The young Kaffir was very proud of his functions. They were not quite novel to him, as once or twice in his native land he had assisted at a more or less diabolical act of cookery. For among his fellows it seemed that Mataki had the reputation of being a magician. A few secrets of elementary surgery, and two or three mesmeric passes learned from his father, were his whole stock in trade. But the Kaffirs came to consult him for all their ailments, real or imaginary, for the interpretation of their dreams and the settlement of their disputes. Mataki was never at fault, and had always some formula ready, some portent to explain, or some sentence to pronounce. The formulæ were generally strange and the sentences preposterous, but his countrymen were satisfied. And what more would you have?

Besides, the flasks and retorts by which he was surrounded in Cyprien's laboratory—to say nothing of the mysterious operations in which he was allowed to take part—could not but contribute to his prestige.

Cyprien often smiled at the solemn airs the black gave himself in performing this humble task of stoker and preparer, in putting on the coal and poking the fire, or dusting the rows of crucibles and test tubes. And in this gravity there was something even pathetic—that artless expression of the awe inspired by science in a nature degraded, but intelligent and greedy to learn.

But Mataki had his play hours like other men, especially when he was in the company of Li. A firm friendship had sprung up between these two, different as they were in their origin, during the now very frequent visits that the Chinaman paid to Watkins Farm. They had both been rescued by Cyprien from imminent death, and regarded him with the warmest gratitude. It was thus very natural that they should be first drawn toward each other by a sincere sympathy, and then that this sympathy should be changed into affection.

Between themselves Li and Mataki had given the young engineer a familiar name that well expressed the nature of the sentiment with which they regarded him. They called

him "pa," and never spoke of him except in terms of admiration and devotion.

On Li's part this devotion showed itself in the scrupulous attention with which he washed and got up Cyprien's linen; on Mataki's part by the rigid punctuality with which he carried out all his master's instructions.

But sometimes the two friends went a little further in their endeavor to gratify their "pa." Occasionally, for instance, Cyprien would find on his table certain fruits or dainties that he had never ordered, and which never appeared in the tradesmen's bills. Now and then when his shirts returned from the wash they would be provided with gold studs of mysterious origin. An excellent easy-chair appeared among the furniture; an embroidered cushion, a panther-skin, and several costly nicknacks came into the hut none knew whence.

And if Cyprien asked Li or Mataki about them, all he could get were evasive responses, such as, "It wasn't me, sir!" "I wonder who did it!" etc., etc.

Cyprien would have taken little notice of these things had he not suspected that the gifts had been very easily acquired. Had they cost more than the trouble of taking them? Nothing, however, happened to confirm his suspicions, and all his inquiries produced no result, while behind his back Li and Mataki exchanged sly looks, significant smiles, and cabalistic signs that seemed to afford them intense gratification.

Cyprien had, however, other cares to attend to. John Watkins seemed to have made up his mind to get Alice married as soon as possible, and with this in view seemed to keep open quite a museum of probable admirers. Not only was James Hilton there every evening, but all the bachelor diggers whose success in the kopje had in Watkins' eyes given them the necessary qualifications for his son-in-law. The German Friedel and the Italian Pantalacci were among them, both having been among the lucky ones of the mine. Friedel was more pedantic and peremptory than ever; Pantalacci had blossomed out into a colonial swell, resplendent with gold chains and diamond pins. He wore a white linen suit, which made his yellow complexion look still yellower and more cadaverous.

With his buffooneries, his Neapolitan songs, and his

attempts at being a fine gentleman, Pantalacci tried in vain to please Alice, who despised him heartily for the very obvious motive that brought him to the farm. She never listened to him if she could help it, and never gave the faintest smile either at his jokes or his attitudes.

And Cyprien was at work both night and day on other experiments which he intended to try should he fail in his first attempt at diamond-making. He was not content with theory and formula, though with them for hours he would fill notebook after notebook. Frequently did he visit the kopje, to bring home fresh specimens of the gravels and sands and submit them to a searching analysis, which, repeated in many ways, allowed of no margin for error. The greater the danger became of losing Alice Watkins, the more was he resolved to omit nothing that might give him the victory. And yet, so little confidence had he in himself that he whispered not a word to her of the experiment in progress. All Alice knew was that he had gone back to his chemistry—and she was very glad to hear it.

CHAPTER IX

A SURPRISE

It was a great day when the experiment was completed. For two weeks the fire had been allowed to die out, so that the apparatus might gradually cool. Cyprien, considering that the crystallization of the carbon ought by now to have been effected, resolved to open the mound which covered the furnace.

This was no easy matter. The pickaxes had all their work to do to cut their way through the baked earth. It had been hardened like a brick. At length it yielded to the attacks of Mataki, and the upper part of the furnace, the capital, so to speak, was visible. Then the whole furnace was revealed to view.

Cyprien's heart beat a hundred and twenty to the minute as the Kaffir, assisted by Bardik and Li, lifted off the top.

That the experiment had succeeded he could hardly believe. He was one of those who always doubt themselves

But after all it was possible! And if it had! All his hopes of happiness, of glory, and of fortune were contained in that huge black cylinder which now met his sight after so many weeks of trial!

Horror! The cannon had burst!

Yes! Against the formidable pressure of the vapor of the water and the marsh gas raised to such a tremendous temperature the very steel had been unable to contend. The barrel, although two inches thick, had split like a test tube. On one of its sides about half-way down there gaped a huge fissure blackened and twisted by the flames, which seemed to grin in the face of the discomfited engineer.

This was indeed unfortunate! So much trouble to reach a negative! Indeed Cyprien would have felt less humiliated if, thanks to his precautions, the cylinder had resisted the fire—and been found empty. That there might be no diamond inside the tube he was prepared for. But to have heated up and cooled down and cherished for a month or more that old lump of steel, and then to end like this, was the acme of misfortune! He felt inclined to kick the whole concern over his hut—but its weight forbade him.

He was about to leave the spot in despair, when curiosity led him to hold a match at the gap in the tube so as to examine the interior.

"Perhaps," he thought, "the earth I plastered around it has been baked into a brick like that outside."

He was right. But a very curious phenomenon presented itself which at first he could not understand. A sort of clay nodule seemed to have detached itself from the lining of the tube and hardened separately.

The nodule was of a reddish color. It was about the size of an orange, and could easily pass through the gap. Cyprien drew it out, and held it up carelessly to examine it. Then remembering that it was only a piece of clay like the rest, but separately baked, he was going to throw it aside. But it sounded hollow like a piece of pottery.

It was a sort of closed cup in which something seemed to shake. "A regular money-box!" said Cyprien.

But had he under pain of death been obliged to explain the mystery he could not have done so.

However, he resolved to see what it meant. He took up a hammer and smashed the "money-box."

And it was a money-box, and contained a magnificent treasure. There could be no mistake as to the nature of the pebble which disclosed itself to the astonished eyes of the engineer. The stone was a diamond in its gangue, in every respect like an ordinary diamond, but a diamond of colossal dimensions.

It was as large as a fowl's egg. It looked not unlike a potato. It weighed over half a pound.

"A diamond! An artificial diamond!" repeated Cyprien in an undertone. "I have solved the problem notwithstanding the accident to the tube. I am a rich man! Alice, my dear Alice, is mine!"

Then he doubted his eyesight.

"But it is impossible! It is an illusion, a mirage! But I'll soon find out the truth."

And without stopping to put on his hat, mad with joy, like Archimedes jumping from the bath when he discovered his famous principle, Cyprien tore down the road from the farm and bounded like a shot into the workshop of Jacobus Vandergaart.

He found the old lapidary examining some stones which Nathan the broker had brought to be cut.

"Ha! Mr. Nathan, you are just in time," exclaimed Cyprien. "Look here! and you, Mr. Vandergaart, see what I have brought you, and tell me what it is."

He put the stone on the table and crossed his arms. Nathan first took it up. He turned pale with surprise, his eyes opened wide, as he handed the stone to Vandergaart.

Jacobus held it up to the level of his eyes, looked at it in the light from the window, and then looked at it over his spectacles. Then he laid it on the table, looked at Cyprien, and said very quietly:

"That is the biggest diamond in the world."

"Yes! The biggest!" repeated Nathan. "Two or three times as large as the Kohinoor, the Mountain of Light, the pride of the royal jewels of England, and which weighs a hundred and seventy-nine carats."

"Two or three times as large as the Grand Mogul, the largest known stone, which weighs two hundred and eighty carats," said the lapidary.

"Four or five times as large as the Czar's diamond, which weighs a hundred and ninety-three carats!" continued Nathan.

"Seven or eight times as large as the Regent, which weighs one hundred and thirty-six carats," quoth Vandergaart.

"Twenty or thirty times as large as the Dresden diamond, which weighs only thirty-one!" said Nathan, adding immediately, "I should say that after it is cut it will weigh at least four hundred carats! But how can we dare to value it? It is beyond all calculation."

"Why not?" answered Jacobus Vandergaart, who remained the coolest of the two. "The Kohinoor is estimated at a million and a quarter, the Grand Mogul at half a million, the Czar's diamond at three hundred and fifty thousand, the Regent at two hundred and fifty thousand—and that certainly ought to be worth four millions of money!"

"It all depends on its color and quality," said Nathan, who began to recover his senses, and to prepare for the future with a view to a future bargain. "If it is pure and of the first water its value will be inestimable; but if it is yellow, like most of our Griqualand stones, it will not be worth nearly so much. For a stone of that size, I think I should prefer just a slight tinge of sapphire-blue, like the Hope diamond, or perhaps a rose tint, like that of the Grand Mogul, or even emerald shade, like that of the Dresden diamond."

"No, no!" said the old lapidary, excitedly; "I believe in colorless diamonds! Give me the Kohinoor or the Regent! There are gems for you! By the side of them those others are but fancy stones."

Cyprien had heard enough.

"Gentlemen, you must excuse me," said he, hurriedly; "I must leave you for a minute," and, picking up his precious pebble, he ran back along the road to the farm.

Without stopping to knock, he burst open the sitting-room door, found himself in Alice's presence, and, without giving a thought, caught her in his arms and kissed her on both cheeks.

"Hallo! what's up?" exclaimed Mr. Watkins, quite scandalized at the performance.

He was seated at a table in front of Annibale Pantalacci.

"Miss Watkins, I beg your pardon!" stammered Cyprien, surprised at his boldness, but radiant with joy. "I am so happy! I have gone mad with joy. Look! see what I have brought you!" and he threw rather than placed the diamond on the table between the two men.

Like Nathan and Jacobus Vandergaart, they at once recognized it. Mr. Watkins, it being early in the day, was sufficiently sober to take in the matter at a glance.

"You found that—you yourself—in your claim?" exclaimed he.

"Found it!" answered Cyprien, triumphantly. "I did better than that! I made it! Ah, Mr. Watkins, there is some good in chemistry after all!" and he laughed, and he clasped Alice's delicate hand in his own, and she, surprised at his passionate demonstrations, but delighted at his happiness, stood smiling, as he said, "It is you to whom I owe the discovery! You advised me to return to chemistry. It was your daughter, Mr. Watkins, that made me make artificial diamonds! I render homage to her like the knights to the ladies of old, and proclaim that to her alone belongs the credit of the invention! I should never have dreamed of it without her."

Watkins and Pantalacci looked at the diamond, then they looked at each other and shook their heads. They were completely bewildered.

"You say you made that—you yourself?" said Watkins. "Then it is a sham!"

"A sham!" exclaimed Cyprien. "Well, yes! a sham! But Jacobus Vandergaart and Nathan value it as worth two millions at the least, and perhaps four! Although it is an artificial diamond, obtained by a process of which I am the inventor, it is none the less perfectly authentic! You see, there is nothing missing—not even the gangue!"

"And you are going to make other diamonds like it?" continued Watkins.

"If I like. I can make them by the bushel, and I can make them ten times—a hundred times—as large as that! I will make enough of them to pave your terrace with—to macadamize the roads of Griqualand with if you wish! It is but the first step that costs. Once the first stone is

made, the rest is merely a detail—a simple affair of working certain technical formulæ."

"But if that is so," gasped the miner, turning ashy pale, "you will ruin all the mine-owners! You will ruin me! You will ruin all Griqualand!"

"Certainly!" replied Cyprien. "Who would go grubbing for little diamonds in the ground when you can manufacture big ones that will give you a fortune in no time?"

"But it is monstrous!" exclaimed Watkins. "It is a shame! it is abominable! If what you say is true, if you really possess this secret—"

He gasped for breath.

"Well, you see," said Cyprien coldly, "I am not merely talking about it; I brought you my first specimen, and I think it is big enough to convince you."

"Well, then," said Watkins, who had at last recovered his breath, "if it is true—you—you ought to be shot, sir! That is my opinion!"

"And that is mine!" Pantalacci thought proper to add, with a threatening gesture.

Miss Watkins rose, looking very pale.

"Shot, because I have solved a chemical problem that men have been trying for the last fifty years?" answered the engineer, shrugging his shoulders. "That is rather too good!"

"There is nothing to laugh at in it, sir!" replied the furious farmer. "Think of the consequences of what you call your discovery—of all the work in the diggings stopped—of all Griqualand deprived of its glorious industry—of me reduced to beggary!"

"Well, I didn't think of all that, I admit," answered Cyprien, very frankly. "That is the inevitable consequence of industrial progress, and pure science cannot stop to worry itself about it! As to you personally, Mr. Watkins, you need not be alarmed. What is mine is yours, and you know very well the motive I had in working out the subject."

Watkins took the hint, and, as he did not want the Italian to know too much, suddenly shifted his ground. "After all," he said, "you may be right, and you speak like the plucky fellow you are. Perhaps we may under-

stand each other yet. But why do you want to make a lot of diamonds that will soon make your discovery cheap? Why not carefully keep your secret, use it with moderation, and only make one or two stones like that, so as to raise sufficient capital, and become the richest man in these parts? No one would have anything to say against you, things would go on as they are, and you would not have to run counter to all the respectable people in the neighborhood."

This was a new view of the question that Cyprien had never dreamed of. There was no mistake about the dilemma; either he must keep his secret, leave the world ignorant of it and abuse it for his own aggrandizement, or, as Watkins very truly said, depreciate at one blow all diamonds, natural and artificial, and consequently renounce the fortune. For what? To ruin every miner in Griqualand, India, and Brazil!

With the alternative thus placed before him, Cyprien hesitated, but it was only for an instant. He saw that to take the side of sincerity, honor, and fidelity to science was to renounce the very hope that had urged him to the discovery.

The sorrow was as bitter, as poignant as it was unexpected. To fall so suddenly from so sweet a dream!

"Mr. Watkins," said he, gravely, "if I kept the secret of my discovery to myself I should be an impostor! I should trade with false weights, and deceive the public as to the quality of the goods. The results obtained by the man of science do not belong to him alone; they are part of the patrimony of us all. To keep for himself in his own personal interest the smallest part of it would be to commit as vile an act as a man can do! I will not do it! No; I will not wait a week, nor a day, to give to the public the formula which chance and a little thought put into my power. My only reservation will be to give it first of all to those who sent me here. Tomorrow I will send the secret of my process to the Academy of Sciences. Good-bye, sir; I thank you for having taught me my duty. Miss Watkins, I was merely dreaming;" and before Alice could move to stop him Cyprien had taken up his diamond and gone.

CHAPTER X

JOHN WATKINS THINKS MATTERS OVER

CYPRIEN left the farm, sad at heart but resolved to do his duty. He made his way to Jacobus Vandergaart. He found him alone. Nathan, the broker, had gone off to be the first to spread the news so likely to interest the diggers. The news did not cause so much excitement as might be supposed, for Nathan did not then know that the huge diamond was an artificial one.

Cyprien had come to old Vandergaart to verify the quality and color of the stone before drawing up his report.

"My dear Jacobus," said he, as he sat down beside him, "first cut a facet on that boss, so that we can see what is underneath."

"Nothing easier," said the old lapidary, taking the pebble from him. "You have chosen a capital place," added he, as he noticed a slight swelling on one of the sides of the gem, which but for it was an almost perfect oval. "We shall risk nothing in cutting it here."

Without further delay Vandergaart set to work. He took from his wooden bowl a common boort-stone of about four or five carats, and fixed it firmly at the end of a sort of handle. He then began to rub together the exterior surfaces of the two stones.

"We could do it more quickly by cleavage," said he; "but who would dare to amuse himself by hammering at a gem of this value?"

The task was a long and monotonous one. It took nearly two hours. When the facet was large enough to allow of the nature of the stone being seen it had to be polished on the wheel, and that also took some time.

At last the work was finished, and Cyprien and Vandergaart, yielding to their curiosity, took up the diamond to see the result.

A beautiful facet of the color of jet, but of matchless limpidity and splendor, revealed itself to their view.

The diamond was black!

But this almost unique peculiarity added to rather than diminished its value.

Vandergaart's hands trembled with emotion as he flashed the facet in the sunshine.

"It is the finest and most curious gem that ever reflected the sunlight," said he, in a tone of the deepest reverence. "What will it be like when we have cut all its facets so that it can refract the light as well as reflect it?"

"Will you undertake to do it?" asked Cyprien.

"Yes, certainly, my boy, and the honor will be the crowning point of my long career! But perhaps you had better choose a younger and firmer hand than mine."

"No!" answered Cyprien. "Nobody, I am sure, would do the work more carefully or cleverly than you! Take the diamond and cut it at your leisure; you will make it a masterpiece."

The old man turned the stone over and over in his fingers, and sat as if hesitating to tell what was passing in his mind.

"One thing troubles me," he said at length. "The thought of having under my roof a jewel of such value. Here is a couple of millions' worth at the least in the palm of my hand. It is not wise of me to take such a responsibility on myself."

"None will know of it if you say nothing about it; and, as far as I am concerned, I will not betray your secret."

"Perhaps. But you can be followed when you come here! Suppose you are? There are queer people about! I shall not sleep quietly!"

"Perhaps you are right," replied Cyprien, as he understood the old man's hesitation; "but what is to be done?"

"That is what I am thinking of," said Vandergaart, and he remained silent for a moment or so.

Then he continued:

"Listen, my dear fellow. What I am going to say is of some delicacy, and presupposes that in me you have absolute confidence. But you know me well enough to see nothing strange in my suggestion. I must leave here at once with my tools and this stone, and get out of the way into some corner where I am not known—in Hopetown or Bloemfontein, for example. I will hire a room

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and there work in secret, and only return when my work is done. In that way I may perhaps out-manœuvre these rascals. But, I repeat, I am very shy of proposing such a plan to you—"

"But it is a very good one," interrupted Cyprien, "and I shall be very glad if you will start on it."

"I shall want at least a month, and all sorts of accidents may happen to me on the road."

"Never mind, if you think it is all right. And after all, if the diamond does go it does not much matter."

Vandergaart looked at his young friend as if he were horror-stricken. "Has such a stroke of luck bereft him of reason?" asked he of himself.

Cyprien divined his thoughts, and smiled to himself. Then he explained to him whence the diamond had come, and how, if he liked, he could make many more. But the old lapidary—whether it was that he hardly believed the story, or that he did not care to be left alone with a jewel of such price—all the time busied himself in his preparations for starting.

Putting his tools and his clothes in an old leather bag, Vandergaart stuck on his door a notice to the effect that he was "away on business," put the key in his pocket and the diamond in his waistcoat, and set out.

Cyprien accompanied him for a mile or two on the road to Bloemfontein. It was night when the engineer returned, thinking perhaps more of Miss Watkins than of his wonderful discovery.

However, having done but scant justice to the dinner Mataki had prepared, he sat himself down at his writing-table and began the report he intended to send off by next mail to the Academy of Sciences. It consisted of a detailed account of his experiment, and a highly ingenious theory of the reaction which had given birth to this magnificent carbon crystal.

"Its most remarkable characteristic," wrote he, "is its complete identity with the natural diamond, and more especially its possession of a gangue."

And Cyprien did not hesitate to attribute this curious result to the care with which he had coated his apparatus with the earth from Vandergaart Kopje. The mode in which a portion of this earth had detached itself from the

rest and formed a coating around the crystal was not very easy to explain, but this was a point on which further experiments would doubtless throw some light. It was possible that he had discovered a new phenomenon of chemical affinity, and he proposed to carefully work out the subject. He did not attempt to commit himself straight off to a complete theory of his discovery. His object was rather to communicate the news without delay to the scientific world, and to invite discussion on these hitherto obscure and unexplained facts.

Having made good progress in his memoir, and advanced it so far that only a few additional observations were required for its completion, he sat down to supper, and then went to bed.

In the morning he went for a walk among the diggings. The greeting he received was hardly as friendly as it might have been but this he did not notice. He had forgotten all the consequences of his grand discovery as unfolded the evening before by John Watkins—that is to say, the ruin sooner or later of the Griqualand claims and their owners. This was enough, however, to make a man uneasy in a semi-civilized country, whose people never hesitated to take the law into their own hands when the whim seized them. If the manufacture of the diamond was to become a trade, the millions invested in the Brazilian as well as the South African mines would irrevocably be lost. Most assuredly the young engineer would have done wisely to have kept his secret. But his resolution had been distinctly declared, and he had decided to act otherwise.

On the other hand, during the night—a night of torpor, during which Watkins dreamed of diamonds by the score, worth millions apiece—Alice's father had had time to consider. And his thoughts ran in this wise.

Nothing could be more natural than that Annibale Pantalacci and the other diggers should view with anger and anxiety the revolution which Cyprien's discovery would effect. But for him, merely as the owner of Watkins' Farm, the situation was somewhat different. If the claims were abandoned owing to the depreciation of the gems, if the whole mining population were to clear out

from the Griqualand fields, the value of his farm would seriously diminish, his crops would not find buyers, his houses and huts would not let for want of tenants, and some day he might have to bid farewell to so poor a district.

"Good," said Watkins to himself, "but some years will have to elapse before then. Diamond-making has not yet reached a practical stage, notwithstanding Mr. Cyprien. There may be a good deal of chance about it. But, chance or not, he has at least made a stone of enormous value, and if a natural diamond is worth so much, an artificial one under such circumstances is worth considerably more! Yes, we must keep our eyes on this young man. At any rate, we must stop him from proclaiming his proceedings on the housetops. The stone must come into our family, and must not leave it unless handsomely paid for. To keep the maker of it is easy enough, even without committing ourselves too deeply. Alice is there, and by means of Alice I can put the stopper on his going to Europe. Yes; I can promise he shall marry her. I can even let him marry her."

Thus thought Watkins. Hither did his avarice lead him. Throughout he thought only of himself, he saw only himself. And if the old egotist gave a thought to his child, it was only to say, "And after all, Alice has nothing to complain of. The young fool is not so bad in his way. He loves her, and I fancy she is not indifferent to him. What can be better than to unite two hearts that have been made for each other—or rather to let them hope for the union, which need not take place until matters have shaped somewhat?"

So reasoned Watkins, pitting his daughter's happiness against that little piece of crystallized carbon, and expecting he could keep the scales level. And in the morning he had made up his mind. He would see how things turned out, and act accordingly.

In the first place he wished to see his tenant again. Nothing could be easier, for the engineer came to the farm every day. In the second place he longed to gaze once more on the diamond that had assumed such fabulous proportions in his dreams. The second was if anything

the greater attraction, and so Watkins strolled down to the laboratory. Cyprien was at home.

"Well, my young friend," said he, most genially, "and how have you passed the night, the first night after your grand discovery?"

"Very well, Mr. Watkins, very well, thank you," was the frigid reply.

"What! you went to sleep?"

"I did. As usual."

"All the millions," continued Watkins, "all the millions you have been making—did not the thought of them keep you awake?"

"Not at all," replied Cyprien. "Don't you see, Mr. Watkins, that the diamond is only worth millions when it is nature's work. A chemist's diamond—"

"Yes, yes, Mr. Cyprien! But are you sure you can make another?—many others?"

Cyprien hesitated. He knew well that in such an experiment something might happen to prevent his attaining a similar result.

"Ah! you twig!" continued Watkins. "You won't answer. Until you have scored again your diamond will retain its value. Until then, why should you say it is an artificial stone?"

"I repeat, Mr. Watkins, that it is out of my power to retain so important a scientific secret"

"Yes, yes, I know," continued Watkins, with a gesture to the engineer not to speak so loudly, as people outside might hear him. "We will talk about that. Never you fear Pantalacci and his lot; they won't tell of you; it is not their interest to do so. Take my word for it. And look here. Alice and I are overjoyed at your success. We are really. Yes! Can I have a look at the diamond? I hardly had time to examine it yesterday. Will you allow me?"

"I haven't got it now," answered Cyprien.

"You have sent it to France!" exclaimed Watkins aghast at the thought.

"No, not yet. In its rough state no one could judge of its beauty."

"Who have you given it to, then?"

"I gave it to Jacobus Vandergaart to cut, and I have

not the slightest idea where he has gone to with it."

"You trusted a diamond like that to that old lunatic!" exclaimed Watkins, perfectly furious. "You must be mad, sir! stark, staring mad, sir!"

"Bosh!" answered Cyprien. "What does it matter what Vandergaart does with it? How could he get rid of a stone worth so many millions? Do you think he could sell it on the quiet?"

Watkins seemed struck with the argument. It would evidently be rather a difficult matter to dispose of so valuable a stone. Nevertheless, the farmer was uneasy, and he would have given a good deal to prevent Cyprien handing over the jewel to the old lapidary, or rather to make the old lapidary bring it back again immediately.

But Vandergaart had demanded a month, and the impatient Watkins had to wait.

Of course his cronies, Pantalacci, Friedel, and their companions, said all they could against the character of the honest old lapidary. In Cyprien's absence they had a good deal to say about him, and invariably remarked to Watkins that the month was nearly up and no Vandergaart had put in an appearance.

"And why," said Friedel, "should he return to Griqualand? Why shouldn't he keep the diamond of large value whose artificial origin is nowhere shown?"

"Because he would never find a buyer," answered Watkins, reproducing Cyprien's argument.

"That is a fine reason!"

"A very fine reason," said Pantalacci. "And believe me, at this very moment the old crocodile is hundreds of miles away. Nothing could be easier than to doctor the stone so as to make it unrecognizable. You don't even know what its color is! What is to hinder him from cutting it into five or six pieces and making a batch of good-sized stones?"

Greatly was the soul of Watkins troubled by these discussions. He began to think that Vandergaart would never come back. Cyprien alone believed in the old man's honesty, and declared that he would return on the day he had said. He was right.

Vandergaart returned twenty-four hours before his time. Such had been his diligence, and so well had he worked,

that in twenty-seven days he had cut the stone. He came back during the night to polish it on the wheel, worked at it till he had done, and in the morning of the twenty-ninth day Cyprien beheld him enter the door of the laboratory.

"There is your pebble," was all that the old lapidary said as he placed a small wooden box on the table.

Cyprien opened the box and stood dazzled and motionless. On a pad of white cotton wool lay an enormous black crystal of the shape of a rhomboidal dodecahedron. From it streamed forth prismatic fires of such brilliancy as to light up the whole laboratory. The combination of ink-like color with absolutely perfect adamantine transparency and wondrous refractive power gave the most startling results conceivable.

It seemed as though he was in the presence of some unique phenomenon, of some unprecedented freak of nature. All idea of value apart, the splendor of the jewel was something to marvel at.

"It is not only the largest, it is the most beautiful diamond in the world," said Vandergaart, with great gravity and in a tone of paternal pride. "It weighs four hundred and thirty-two carats! You have made something to be proud of, my friend. Your prentice hand has made a masterpiece."

Cyprien gave no reply to the old lapidary's compliments. In his own eyes he was but the author of a curious discovery, nothing more. Many others in the chemical field had failed where he had succeeded, it is true. But what use to humanity would be this manufacture of artificial diamonds? In the future it would inevitably ruin all who earn their living by trading in precious stones, and would enrich nobody.

Then he thought of his elation during the first few hours after his discovery. Now the diamond, beautiful as it had come from Vandergaart's hands, appeared to him but as a worthless stone, to which even the prestige of rarity would not long remain.

Cyprien closed the box, and shaking hands with his old friend, hastened off to Watkins Farm.

The farmer was in the lower room, anxious and uneasy, and thinking of the doubtful chance of Vandergaart's

returning. His daughter was with him doing her best to allay his suspicions.

Cyprien opened the door and stood for an instant on the threshold.

"Well?" asked Watkins sharply, as he suddenly rose from his chair.

"Well, honest Jacobus Vandergaart came back this morning," answered Cyprien.

"With the diamond?"

"With the diamond beautifully cut, and it even now weighs four hundred and thirty-two carats."

"Four hundred and thirty-two carats!" exclaimed Watkins. "And you have brought it with you?"

"Here it is."

The farmer took the box. He opened it, and his eyes sparkled almost as much as the diamond he looked at. Then when his fingers were allowed to close on the splendid crystal, he was so carried away with the thoughts of its colossal value that his excitement became quite laughable.

Tears came into his eyes, and he spoke to the gem as if it were some cherished friend.

"Oh! You love! You superb, you splendid stone! Here you are back again, my beauty! You are magnificent! You are a weight! How much are you worth in golden sovereigns? What shall we do with you, my darling? Send you to the Cape and on to London to be seen and admired? But who will be rich enough to buy you? The Queen herself could not afford so great a luxury! You would take two or three years of her income! She would want a Parliamentary vote! A national subscription! And they'll do it, never fear! And you'll go to the Tower of London and sleep by the Kohinoor, who is but a very little chap by the side of you. What are we to value you at, my pet?"

And then, betaking himself to his mental arithmetic, he continued:

"For the Czar's diamond Catherine II. paid a million roubles and an annuity of four thousand pounds. Surely you are worth a million sterling, cash down, and twenty thousand a year for ever afterward."

Then, struck with the sudden idea:

"Should not the owner of such a jewel be raised to the peerage? Look here, Alice! Two eyes are not enough to admire this with!"

For the first time in her life Miss Watkins looked at a diamond with some interest.

"It is really very beautiful. It glows like the piece of carbon that it is, but like the carbon when it is alight," said she, as she carefully picked it up.

Then, by an instinctive movement, that every girl in her place would have had, she turned to the looking-glass and held the jewel to her forehead.

"A star set in gold!" said Cyprien gallantly.

"True. We'll call it a star!" exclaimed Alice. "Let us christen it the *Star of the South.* What do you say, Mr. Cyprien? Is it not as black as our native beauties and as brilliant as the constellations of our southern sky?"

"Never mind the Star of the South," said Watkins, who attached but little importance to a name, "but take care you don't drop it, it will break like glass."

"Indeed! Is it as fragile as that?" answered Alice, scornfully replacing the gem in its box. "Poor star! you are only a mockery—a vulgar bottle-stopper!"

"A bottle-stopper!" exclaimed Watkins, almost choked with horror. "You young people respect nothing!"

"Miss Alice," said the engineer, "it was you who encouraged me to take up artificial diamond-making. It is owing to you that this stone now exists; and your father will allow me, I hope, to offer it to you in remembrance of your happy influence on my work!"

"What!" exclaimed the farmer unable to hide his delight at so unexpected an offer.

"Alice," continued Cyprien, "the diamond is yours. If you will accept it, I give it!" and Miss Watkins, as her only reply, held out her hand to him, and he gently clasped it in his own.

CHAPTER XI

THE STAR DISAPPEARS

THE news of Vandergaart's return promptly spread. Visitors to the farm soon began to arrive in crowds to gaze upon the wonder of the kopje. They were not long in learning that the diamond belonged to Miss Watkins, and that her father was its real owner. Hence a considerable increase in the public excitement.

It may be mentioned that the artificial origin of the stone had been kept very quiet. The Griqualand miners were not so ill-advised as to noise abroad a secret that might ruin them. And Cyprien, unwilling to trust to chance, had made up his mind to say nothing and to keep back his memoir until by a second experiment he had verified his facts. What he had done once he wished to be sure he could do again.

Public curiosity, then, was highly excited, and John Watkins could not with decency decline to gratify it. Greatly was his vanity flattered. He laid the Star on a pad of cotton wool, and placed it on the top of a small white marble column in the center of the mantelpiece in his parlor. There the whole day long did he remain seated in his arm-chair, admiring the incomparable jewel and exhibiting it to the public view.

James Hilton was the first to throw out a hint as to the imprudence of these proceedings. Had Watkins thought of the danger he was running in exhibiting to all comers a gem of such value? Ought he not immediately to send off to Kimberley for a special police guard? That very night, perhaps, might not pass without something occurring.

Watkins was rather scared at these warnings. He hastened to follow the judicious advice, and breathed very much more freely when toward evening a squadron of mounted police put in an appearance. These twenty-five men were put up in the outhouses of the farm.

The crowds could not but increase during the following days, and the fame of the Star of the South extended beyond the boundaries of the district to the most distant towns. The colonial journals devoted article upon article to its dimensions, its figure, its color, and its brilliancy.

The telegraph cable from Durban carried its details by way of Zanzibar and Aden to Europe and Asia, and on to America and Australasia. Photographers begged to be allowed to take the portrait of the marvelous gem; special artists came from the illustrated journals to reproduce its image; in fact, the event became of world-wide celebrity.

And of course legend began to weave its web round the stone. Stories began to circulate among the miners of its mysterious properties. With bated breath they told how a black stone must necessarily bring bad luck. Practical men shook their heads, and vowed they would rather Watkins had the stone than they. In short, calumny, without which celebrity cannot exist, did its unenviable duty with the Star of the South, and the Star very naturally was in no way troubled thereby, but continued to pour forth its brilliant rays on its obscure detractors.

Watkins, however, was much more sensitive to them. The gossip exasperated him. It seemed as though it depreciated the value of the stone, and he resented it as a personal insult. When the governor of the colony, the officers of the neighboring garrisons, the magistrates and all the high functionaries had done homage to his jewel, it seemed to him that such depreciatory comment was little less than sacrilege.

To create a reaction against this silly trash and to gratify his weakness for the pleasures of the table he resolved to give a grand banquet in honor of his cherished diamond, which, notwithstanding what Cyprien had said and Alice wished, he still dreamed of converting into coin.

Such, alas! is the influence of the stomach on the feelings of many men, that the mere announcement of the dinner effected quite a revolution in the opinion of Vandergaart Kopje. Those who had been most conspicuous in maligning the Star now changed their game, and confessed that after all the stone was innocent of the noxious influences they had ascribed to it, and that an invitation from Mr. Watkins would be thankfully received.

Long will the fame of that dinner continue. Eighty guests sat down in a tent pitched along one side of the parlor, the wall of which had been removed for the occasion. A baron of beef occupied the center of the table,

and around it were samples of all the game in the district. Mountains of vegetables and fruit, and gallons of beer and wine, were the chief features of this truly pantagruelian repast.

The Star of the South, placed on its pedestal and begirt with lighted candles, presided behind John Watkins, at the festival given in its honor.

Twenty Kaffirs officiated as waiters under the directions of Mataki, who was loaned by his master for the occasion.

Besides the police, of whose services Mr. Watkins thus showed his appreciation, there were present all the chief personages of the camp and its neighborhood. Mathys Pretorius was there, and so were Nathan, James Hilton, Pantalacci, Friedel, Steel, and fifty others.

And even the dogs—and, above all, the ostriches—took part in the festivities and came in to beg during the meal.

Alice took the end of the table opposite to her father, and did the honors with her accustomed grace, but not without secret chagrin, for neither Cyprien nor Vandergaart was present, and she well knew the motives of their abstention.

The engineer had from the first avoided as much as possible the society of Friedel, Pantalacci, and their particular friends; and now, since his discovery, he was well aware of their anything but good wishes toward him, and even of their threats against the inventor of the process that would eventually ruin them. He therefore excused himself from appearing at the dinner. To Vandergaart, Watkins had made the most urgent offers of reconciliation, but the old lapidary had rejected them with scorn.

The banquet approached its end. Thanks to Alice's presence, the boisterous spirits of the diners had been happily somewhat restrained. Watkins arose, rested both hands on the tablecloth, and began the speech of the occasion.

"This day," he said, "is the greatest day of my colonial life. After the trials and struggles of my youth, to see myself here in wealthy Griqualand, surrounded by eighty friends assembled to do honor to the greatest diamond in the world, is a pleasure I shall never forget. It is true that tomorrow one of our honorable friends may find a

bigger stone. That is the beauty and poetry of a digger's life! (Cheers.) I wish you may have such luck! (Laughter and cheers.) I do not hesitate to affirm that it would be difficult to satisfy the man who in my place would not declare himself satisfied. But to conclude, I invite you all to drink to the prosperity of Griqualand and a rising diamond market—notwithstanding all that may have happened—and a happy voyage to the Star of the South down the country, around the Cape, and home, I hope, to England."

"But," said Steel, "won't there be some danger in sending a stone of such value down to the Cape?"

"Oh, it will be strongly escorted!" replied Watkins. "Lots of diamonds have gone the same road in safety."

"Even that of Durieux de Sancy," said Alice; "although, had it not been for the servant's devotion—"

"Eh!" said Hilton; "what was that?"

"The anecdote runs," said Alice, "that De Sancy was a French gentleman of the Court of Henry III. He owned a famous diamond, still called after him. The diamond had already been through some remarkable adventures. It had belonged to Charles the Bold, and he was wearing it when he was killed under the walls of Nancy. A Swiss soldier found it on the Duke of Burgundy's corpse, and sold it for a florin to a poor priest, who parted with it for five or six florins to a Jew. At the time it belonged to De Sancy the royal treasury was in difficulties, and he consented to put the stone in pawn to raise funds for the king. The money-lender at the time was at Metz, and De Sancy entrusted the jewel to one of his servants to take it there. 'Are you not afraid that the man will run away with it to England?' people asked. 'I am sure of him!' was the answer. In spite of this assurance neither the man nor the diamond arrived at Metz, and the court made great fun of De Sancy. 'I am sure of my servant,' he persisted. 'He must have been assassinated!' And in fact, when a search was made, the man's body was found in a ditch by the roadside. 'Cut him open!' said De Sancy; 'the diamond ought to be in his stomach!' They did as he ordered, and it was found to be so. The humble hero, whose name is unknown to history, had been faithful to death to his duty and honor, 'outshining,' as the old

chronicler says, 'by the splendor of his deeds the splendor of the jewel he carried!' I shall be very much surprised," said Alice, as she concluded her story, "if the Star of the South does not inspire some similar instance of devotion during its travels."

The sentiment was received with loud acclamation, eighty arms lifted high an equal number of glasses, and all eyes turned instinctively to the mantelpiece to render homage to the incomparable gem.

The Star had disappeared!

The astonishment on the eighty faces was so manifest that the host turned sharply around to see what was the matter.

He fell back in his chair as if thunderstruck.

They crowded around him, loosened his cravat, dashed cold water over his face—and he soon came to.

"The diamond!" he roared. "The diamond! Who has taken the diamond?"

"See that no one leaves the room," said the chief of the police, ordering his men to the doors.

The guests looked at each other in dismay, or spoke in whispers. Not five minutes before all of them saw, or thought they saw, the diamond in its place.

"I propose we shall all be searched before we leave the room," said Steel with his usual frankness.

"Yes! yes!" replied the company, seemingly unanimous.

The suggestion gave Watkins a ray of hope.

The police officer drew up the guests along one side of the room and began to search himself to begin with. He turned out his pockets, took off his boots, and patted his clothes in the customary professional manner. Then he proceeded to search the guests in similar fashion, and then one by one they passed before him and were subjected to a more minute examination.

The investigation produced no result.

Every nook and cranny in the place was then carefully pried into. Not a trace of the diamond was discovered.

"There are the Kaffirs who were waiting on us!" said the police officer, who did not yet like to own himself defeated.

"That is so!" was the reply. "The Kaffirs are quite thieves enough to have done it!"

The waiters had, however, gone out just as Watkins began his speech, and were now grouped around a fire outside, making merry with the scraps of the meal that had been reserved for them. Their guitars made out of calabashes, flutes blown by the nose, and tom-toms of different kinds, had already commenced that deafening cacophony which precedes the musical manifestations of the natives of South Africa. The Kaffirs hardly knew what to make of it when they were brought back and searched in their scanty garments. And the search was as useless as all that had gone before.

"If the thief is one of the Kaffirs—and he ought to be—he has had quite time enough to clear off," remarked one of the guests, very sensibly.

"That is so," said the police officer; "and there is perhaps only one way of finding him out, and that is to apply to one of the native medicine-men. That might succeed—"

"If you will let me," said Mataki, "I will try."

The offer was immediately accepted. The guests formed a circle around the natives, and Mataki, thoroughly accustomed to the work, began the ceremony.

He first breathed upon two or three pinches of tobacco, which he took from his pouch, and said:

"I will now try the wands."

He then stepped to a neighboring bush and cut off a score of twigs. These he measured very carefully and cut them all down to the same length of about twelve inches. Then he distributed them one to each Kaffir, keeping one for himself.

"Now you can go away where you like for a quarter of an hour," said he, in a solemn tone, "and you will come back when you hear the tom-tom! If one of you is the thief his wand will be three inches longer than the rest."

The Kaffirs dispersed visibly affected by this little speech, knowing well that according to the summary proceedings of Griqualand justice they could be tried and hanged in a few minutes without a word being heard in their defense.

The guests, who had been much interested in the scene, were naturally impressed by it according to their different dispositions.

"The thief need not come back at all," objected one.

"Well, then, that would show who was the thief," replied another.

"What bosh! He can easily do Mataki by cutting off three inches, so as to counterbalance the lengthening he is afraid of."

"That is what the medicine-man is hoping for, perhaps, so as to catch him on the hop."

However, the quarter of an hour elapsed, and Mataki beat the tom-tom and called in his compatriots. They all returned and handed back their sticks, Mataki formed a bundle of them, and found them all of the same length. He was going to put them on one side and declare that the honor of his friends was cleared, when he bethought him of measuring the bundle with the stick he had retained for himself.

He did so, and all the sticks in it were three inches short!

The Kaffirs had judged it best to provide against the lengthening, which, to their superstitious minds, was far from improbable.

A general shout of laughter saluted this unexpected result. Mataki seemed quite humiliated that this method whose efficacy he had frequently proved in his kraal, should turn out a failure in civilized life.

"We must give it up for the present," said the police officer to Watkins, who was seated in his arm-chair, plunged in despair. "We may do better tomorrow if we offer a good reward for information that may put us on the track of the thief."

"The thief!" exclaimed Pantalacci. "And why should he not be the man who was trying his comrades just now?"

"What do you say?" asked the officer.

"Why, Mataki, who played the medicine-man to divert your suspicions."

Had Mataki been noticed at this moment he would have been seen to make a curious grimace and hurriedly leave the room and run inside his hut.

"Yes," continued the Italian, "he was with his companions waiting on us during the dinner. He is a thorough cheating scoundrel, and why Mr. Cyprien has taken a fancy to him no one can make out."

"Mataki is honest; I will answer for that," said Miss Watkins, eager to defend Cyprien's servant.

"Eh! How do you know?" exclaimed the farmer. "Yes, he is quite capable of laying hands on the Star!"

"He cannot be far off," said the police officer. "We can soon search him."

An instant later Mr. Watkins and his guests were at Mataki's hut. The door was fastened. It was broken in. Mataki was not there, and they waited for him in vain throughout the night.

Nor did he come back next morning, and it seemed certain that he had fled from Vandergaart Kopje.

CHAPTER XII

MAKING READY

In the morning, when Cyprien learned what had happened at the banquet, the first thing he did was to strenuously object to the serious charge brought against his servant. He agreed with Alice that Mataki could not be such a thief as was supposed. In fact he would rather have suspected Pantalacci and his companions who seemed to him very much more suspicious characters.

It was not likely, however, that a white man was the guilty party. To those who knew nothing of its origin, the Star of the South was a natural diamond, and consequently of such value that the getting rid of it would be difficult.

"All the same," said Cyprien, "it cannot possibly be Mataki."

But then he suddenly remembered certain petty larcenies of which the man had been guilty. In spite of all his master's warning, the Kaffir had never been able to cure himself of his objectionable habits. What he had taken was, it is true, almost valueless, but still the tendency shown could not but tell against him in any judicial investigation.

And there were other things in favor of the presumption. There was his presence in the dining-room when the diamond was eclipsed as if by magic. There was his not having been found in his hut.

And then there was his flight.

For he had certainly left the district, and Cyprien waited in vain during the morning for Mataki to reappear. He could not believe in his servant's guilt; but his servant did not return. And further examination showed that sundry objects and utensils such as a man would take with him for a journey across the African desert had also gone. There was no further room for doubt. Guilty or not guilty, the Kaffir had fled.

About ten o'clock the engineer, very much more grieved at the conduct of Mataki than at the loss of the diamond, called at Watkins Farm.

There he found the farmer in conference with Pantalacci, Hilton, and Friedel. As he presented himself, Alice, who had seen him coming, also entered the room where her father and his three cronies were noisily discussing what to do to recover the stolen diamond.

"We must follow Mataki!" exclaimed Watkins angrily. "We must get hold of him, and if the diamond is not handed over, we must rip him open to see if he has swallowed it! Ah, my lass, it was a capital notion of yours to tell us that story yesterday!"

"But," said Cyprien, in a quiet tone, anything but pleasing to the farmer, "to swallow a stone of that size Mataki would have to have a stomach like an ostrich!"

"A Kaffir's stomach is capable of anything, Mr. Cyprien," replied Watkins. "And if you think there is anything to laugh at—"

"I did not laugh, Mr. Watkins," said Cyprien seriously. "But if I am sorry about the diamond, it is only because you allowed me to give it to Miss Watkins."

"I am just as grateful for it," said Alice, "as if I still had it."

"There's a woman's head for you!" exclaimed the farmer. "Just as grateful as if she still had it—a diamond whose equal exists not in the world!"

"Well, it is not quite the same thing," said Hilton.

"Not quite!" added Friedel.

"On the contrary, it is the same thing!" answered Cyprien. "For as I made that diamond I can make another."

"Oh, Mr. Engineer!" said Pantalacci, with a threatening

look. "I should advise you not to try another experiment —in the interest of Griqualand—and of yourself!"

"Really?" replied Cyprien. "I am not aware that I had to ask your permission in the matter."

"Don't let us talk about that," said Watkins. "Is Mr. Cyprien sure that he will succeed in a second attempt? Can he guarantee that the second diamond he makes will have the color, the weight, and consequently the value of the first? Can he even undertake to make a second stone, even of inferior value? Has not his success been due in a great measure to chance?"

The engineer could not but be struck with the reasonableness of these questions. His experiences were quite in accord with the teachings and practice of modern chemistry, but had not chance come in to make him succeed? And if he tried again, could he be certain of a triumph?

It was important then that the thief should be captured and the diamond recovered.

"By-the-bye, have you found any trace of Mataki?"

"None," answered Cyprien.

"Have they searched the neighborhood?"

"Yes, and searched it well!" replied Friedel.

"The scoundrel probably cleared off during the night, and it is almost impossible to know where he has gone!"

"Has the police officer taken the matter in hand?" asked Watkins.

"Yes," answered Cyprien, "and he has found no trace at present."

"Ah!" exclaimed the farmer, "I will give five hundred pounds for him if they can catch him."

"Very likely, Mr. Watkins," said Pantalacci. "But I am afraid you will never see the diamond, nor the man who took it."

"Why not?"

"Because once he has got a start," replied the Italian, "he will never be fool enough to stop on the road. He will cross the Limpopo, plunge into the desert, and make for the Zambesi or Tanganyika, or go among the Bushmen if he thinks better."

Did the astute Neapolitan really think what he said? Was he not speaking thus to prevent any pursuit of

Mataki, in order that he might undertake it alone? Thus thought Cyprien as he watched him narrowly.

But Watkins was not the man to give up the game because it was difficult to play. He would have sacrificed his entire fortune to get back the incomparable stone, and through the open window his eyes in their angry impatience seemed to gleam across the green slopes of the Vaal as if he hoped to find the fugitive on the horizon.

"What does that matter? I must have my diamond! I must catch this scoundrel! If I hadn't the gout it wouldn't take long, I tell you!"

"Father!" said Alice, trying to soothe him.

"Look here! what do you want for your trouble?" asked the farmer, looking around him. "Who'll go after the nigger? I'll make it worth your while."

And as nobody spoke he continued:

"You four want to marry my daughter! Well, catch me the man who stole my diamond"—he now called it "*my* diamond"—"and I give you my word that the man who does so shall marry her."

"Done!" exclaimed Hilton.

"Agreed!" said Friedel.

"Who would not endeavor to win so precious a prize?" simpered Pantalacci.

Alice blushed deeply and vainly endeavored to hide her confusion, ashamed at seeing herself thus put up to auction, and that in the presence of the young engineer.

"Miss Watkins," said Cyprien in a low tone, and leaning respectfully toward her, "I should like to try my fortune in this, but have I your permission?"

"You have, and my best wishes, Mr. Cyprien!"

"Then I am ready to go to the end of the world!" exclaimed Cyprien, turning toward Mr. Watkins.

"You won't be far out," said Pantalacci, "for Mataki will lead you a nice dance. By tomorrow he ought to be at Potchefstroom, and he will have reached the hills before we have left our diggings."

"And what prevents our starting immediately?" said Cyprien.

"You can go if you like," replied the Italian. "But for my part I want some food with me—a wagon, a dozen

oxen, and a couple of saddle-horses at the very least. And we cannot get that nearer than Potchefstroom."

Again, was Pantalacci speaking seriously? Was it his object to discourage his rivals? Perhaps; but he was nevertheless quite right. Without such means of locomotion, without such resources, it would be folly to attempt a journey in Northern Griqualand.

But a team of oxen, as Cyprien knew, would cost about four hundred pounds, and he had only one hundred and sixty.

"An idea!" shouted Hilton, who, as an "Africander" of Scottish descent, had a strong vein of economy in his disposition. "Why shouldn't we four go partners? The chances would be more equal, and the cost would be much less."

"That seems reasonable," said Friedel.

"I agree," answered Cyprien.

"Then," remarked Pantalacci, "it must be understood that each man retains his independence, and is free to leave his companions whenever he thinks fit."

"Of course," replied Hilton. "We club together to buy the wagon, the team, and the provender, but we can each leave when we please."

"Agreed," said Cyprien, Friedel, and Pantalacci.

"When will you start?" asked Watkins, whose chance of recovering his diamond was thus quadrupled.

"Tomorrow, by the coach to Potchefstroom," answered Friedel; "there's no good thinking of getting there earlier."

"Right!"

As soon as this was settled, Alice took Cyprien apart, and asked him if he really believed that Mataki was the author of the theft.

"I am forced to confess," answered the engineer, "that all the presumptions are against him, chiefly on account of his flight. But I feel sure that Pantalacci has some interest in spinning things out as long as he can in regard to it. What a partner to work with! Well, all is fair in war. It is better to keep him in hand, and I can watch his movements more easily than by letting him go off by himself."

The four suitors soon bade farewell to Watkins and his daughter. As was only natural under the circumstances, the ceremony was a brief one, and consisted merely of a shake of the hand. What could the rivals say in thus going off together, each wishing the other at the bottom of the sea?

When he reached home, Cyprien found Li and Bardik. The young Kaffir, since he had entered his service, had done his work most zealously. He and the Chinaman were having a quiet chat together, when the young engineer announced that he was going away with Friedel, Hilton, and the Neapolitan in chase of Mataki.

A look passed between them—only one. Then, without an allusion to the fugitive, they came up to Cyprien and said:

"Pa, take us with you."

"Take you with me? And why?"

"To do your cooking," said Bardik.

"To do your washing," said Li.

"And to stop the rascals from doing you harm," said both, in chorus.

Cyprien gave them a keen glance.

"Very well," he replied, "I will take you both, if you wish it."

Then he went out to bid good-bye to Vandergaart, who, without showing approval or disapproval of the expedition, shook him cordially by the hand and wished him success.

In the morning, as, followed by his two men, he walked down to the camp to join the coach for Potchefstroom, he lifted his eyes to Watkins Farm, which was still wrapped in sleep.

Was it an illusion? He thought he recognized behind the muslin curtain of one of the windows a slight, girlish form waving a hand in token of farewell.

CHAPTER XIII

ACROSS THE TRANSVAAL

On arriving at Potchefstroom, the four travelers ascertained that a young Kaffir, whose description tallied with that of Mataki, had passed through there the evening before. This promised well for the success of the expedition. But it seemed as though the enterprise would take some time, as the fugitive had provided himself with a light carriage drawn by an ostrich, and thus rendered it no easy matter to catch him.

For there are few better goers than these birds, either on the score of endurance or speed. Ostriches of burden, however, are somewhat rare, owing to the difficulty in breaking them in. Hence neither Cyprien nor his companions could obtain any at Potchefstroom, and Mataki was off to the north with a good start and an animal that could put a dozen horses on their mettle.

The only thing left was to follow him as quickly as possible. He had a great advantage in his superior speed as against that obtainable from the mode of locomotion his pursuers intended to adopt. But the strength of the ostrich has its limits. Mataki would be obliged to halt for a time, and if the worst came to the worst, was sure to be caught at the end of his journey.

Cyprien soon had cause to congratulate himself on having brought Li and Bardik with him, when he set about procuring his outfit. It was no easy matter to select only such articles as were useful and necessary. There is no guide like experience. Cyprien was an excellent hand at the calculus, but of the A B C of Veld life, of life "on trek," he knew nothing. And his companions, instead of helping him with their advice, showed rather a tendency to lead him astray.

As far as the tilted wagon, the team of oxen, and the bulk of the commissariat were concerned, there was no difficulty. Mutual interest commanded that these should be judiciously chosen, and Hilton acquitted himself to perfection. But it was not so with matters that were

left to individual choice, such, for example, as buying a horse.

Cyprien had noticed in the market a good-looking three-year-old, whose price was not excessive. He had tried his seat, found it suited him, and was about to hand over the money, when Bardik took him aside, and said:

"Are you going to buy that horse?"

"Yes. It is the best I can find at the price."

"It is not worth having as a gift," answered the Kaffir. "It won't stand a week's travel."

"Why not? Are you trying the medicine-man business?"

"No, Pa; but Bardik knows the desert, and says that that horse is not salted."

"Not salted? Do you want me then to buy a horse in a cask?"

"No, Pa; but it means that he has not had the Veld disease. He must have it soon, and then if it does not kill him, it will make him useless."

"Oh!" said Cyprien, thinking there was something in the caution after all. "What is the disease?"

"A burning fever and a cough," said Bardik. "You must not buy a horse that has not had it. You can easily see those that have—and once they have had it, they very seldom catch it again."

There was no excuse for hesitation under such circumstances. Cyprien postponed matters, and went in search of further information. Everybody he asked confirmed what he had heard from Bardik. The fact was so notorious that it was seldom mentioned.

Having been put on his guard, the engineer became more prudent, and betook himself to a veterinary surgeon. Thanks to his guidance, he in a few hours secured the very mount most suitable for his purpose, in the shape of an old gray horse consisting of nothing but skin and bone, and only possessing a fragment of tail. That he had been "salted" was obvious enough from his appearance; and, although his trot was rather stilted, he was evidently a good one to go, if a poor one to look at. Templar—such was his name—enjoyed quite a reputation

in the country for endurance, and when Bardik had inspected him—for the Kaffir was of course consulted—he declared himself thoroughly satisfied.

Bardik himself was specially entrusted with the management of the wagon and the team, and therein had considerable assistance from Li. No mounts had to be bought for them, and Cyprien's horse-dealing terminated with his paying for his own steed.

Another difficult matter was the selection of the battery. Cyprien at last decided on a Martini-Henry and a Remington, which, though not very elegant in appearance, was a straight shooter and a rapid loader. One thing he would not have thought of, had the Chinaman not suggested it to him, and that was a stock of explosive bullets. He had imagined that five or six hundred cartridges would be sufficient, and was greatly surprised to find that four thousand was the minimum prudence demanded in this land of wild beasts and savage men.

Cyprien also purchased a couple of revolvers with explosive bullets, and completed his armament by securing a superb hunting-knife, which for five years had hung in the window of the gun-maker at Potchefstroom without any inquiry being made for it.

It was now bought to please Li, he having assured Cyprien that nothing would turn out more useful than this knife, and the trouble he afterward took in sharpening and polishing it, showed that confidence in the cold steel which he shared with the rest of his race.

Of course the famous red box went with the careful Chinaman. In it he stowed away, with other mysterious articles, about sixty yards of fine strong line. When he was asked what it was for, he replied, evasively:

"Have not your clothes got to be dried in the bush as well as anywhere else?"

In twelve hours the purchases were all made. Waterproofs, wrappers, cooking utensils, tinned provisions, yokes, chains, spare harness, were stowed at the back of the wagon, and formed the basis of the general store. The front of the wagon was littered with straw, and served as the bedroom and shelter for Cyprien and his companions.

Hilton had done his part of the work thoroughly well, and seemed to have omitted nothing they were likely to require. He was very vain of his colonial experience, and to show his superiority, rather than from any feeling of friendliness, favored his companions with a good deal of information on the customs of the Veld.

At last Pantalacci interrupted with:

"What makes you want to tell the Frenchman all that? Do you want to see him win the prize? If I were you, I would keep all I knew to myself."

Hilton regarded the Italian with sincere admiration.

"That is a good notion of yours. Such an idea would not have occurred to me."

Cyprien had honestly told Friedel what he had learned about the horses of the country, but to no purpose. The German thought no one knew anything but himself, and bought the youngest and most fiery steed he could—the very one that Cyprien had refused. He also laid in a stock of fishing-tackle, asserting that there would be no lack of sport.

The preparations were finished at last, and the caravan formed up in the order it was to keep on the march.

The wagon, drawn by a dozen red and black oxen, went first, in charge of Bardik. Sometimes the Kaffir, whip in hand, walked by the side of his team; sometimes he took his seat in the front of the chariot, where, regardless of the jolting, he sat in triumph, enchanted with his mode of locomotion. The four horsemen formed the front and rear guards, except at such times as they separated to shoot a little game, or make a reconnaissance.

After a very brief consultation it had been decided to make for the source of the Limpopo. All advices tended to show that Mataki was following this road—and, in fact, he could not well take another, if his intention was to get as far from the British possessions as soon as he could. The Kaffir had an advantage over his pursuers in his perfect knowledge of the country, and the lightness of his equipage. He obviously knew where he was going, and the best road to take thither, and, thanks to his friends in the north, he was sure of welcome and shelter, and even help, if he wished it. There was, indeed, a chance that he might raise his tribe and turn to bay on those who were

chasing him. Cyprien and his comrades were fully aware of this, and appreciated the need of their traveling together for their mutual safety and ultimate success.

The Transvaal, which they intended to cross from south to north, is that vast region of Equatorial Africa lying between the Vaal and the Limpopo. Geographically, it is divided into three regions—the table-land, or Hooge Veld; the hill country, or Banken Veld; and the Bush Veld.

The table-land is the most southerly; it is formed by the mountain chains which extend westward and southward from the Drakenberg. It is the mining country of the Transvaal, and the climate is as cold and as dry as that of the Bernese Oberland.

The Banken Veld is more particularly the agricultural district. Extending along the north of the Hooge Veld, its deep valleys, drained by pleasant watercourses, and shaded by evergreen trees, are inhabited by the descendants of the Dutch.

The Bush Veld—the hunting-ground of the Transvaal—comprises the wide, rolling plains stretching up to the banks of the Limpopo toward the north, and to Bechuanaland toward the east.

Leaving Potchefstroom in the Banken Veld, they had to cross diagonally nearly the whole of it before reaching the Bush Veld. This first part of the Transvaal offered few difficulties to their progress. They were still in a half-civilized country. The worst that could happen was a wheel stuck fast in the mud, or a sick ox. Wild ducks, partridges, and antelopes abounded, and each day furnished an ample breakfast or dinner. The night was spent at some farm, whose inhabitants, isolated from the rest of the world for three-quarters of the year, were sincerely glad to receive their guests.

At almost every farm they stopped at, they heard news of Mataki. Everywhere he had been seen to pass in his ostrich carriage; at first, two or three days in advance, then five or six, then seven or eight. Evidently they were on his track, but evidently also he was gaining rapidly on his pursuers, who, however, felt sure of catching him at last.

Cyprien and his three companions began to take things easy, and to amuse themselves in their special ways. The

engineer made a collection of rock specimens, the German botanized, Pantalacci tormented Bardik and Li, and atoned for his buffoonery by making delicious dishes of macaroni at every halt. Hilton's business was to keep the caravan provisioned with game, and hardly a day passed in which he did not bring down his six brace of partridges, his score of quails, and occasionally a wild boar or an antelope.

By easy stages they reached the Bush Veld. The farms became fewer, and at last disappeared altogether. The travelers were on the extreme verge of civilization. Henceforth they had to camp out at nights; huge fires had to be lighted for men and cattle to sleep around, and a constant watch had to be kept.

The country became wilder. Stretches of yellow sand, clumps of thorn-bushes, and at long intervals a marshy stream or so, took the place of the green valleys of the Banken Veld. Now and then the underwood was so thick and thorny that, instead of keeping on its straight course the caravan had to go some distance around. The thorn-trees were from nine to fifteen feet high, with numerous branches spread out almost horizontally, and armed with spines from two to four inches in length, as hard and sharp as daggers.

This outer zone of the Bush Veld is generally known as the Lion Veld, but it hardly seemed to justify its name, for after three days' working through it not a lion had been seen.

"The name," said Cyprien, "is probably traditional, and the lions have long since retired to the desert."

But Hilton laughed.

"You don't believe in the lions? That is because you don't know how to look for them."

"Not see a lion in the middle of a naked flat like this!" said Cyprien ironically.

"Well, I will bet you ten pounds," said Hilton, "that in less than an hour I show you one you didn't see."

"I never bet, on principle," said Cyprien, "but I shall be glad to see your lion, all the same."

The journey was continued. For about half an hour all went well, and nothing was said about lions, when suddenly Hilton exclaimed:

"Do you see that ant-hill over there on the right?"

"How beautiful!" said Friedel. "We have seen nothing else but those things for the last three days."

And, in fact, nothing is more common in the Bush Veld than these huge, yellow mounds, built up by ants innumerable, and, with the few clumps of straggling mimosas, forming the only break in the plain's monotony.

Hilton laughed sarcastically.

"Mr. Cyprien," he said, "if you like to take the trouble of galloping over there—where I am pointing with my finger—you will see what you want. Don't you go too near, however, or you may come to grief."

Cyprien gave his horse the spur, and trotted off.

"That is a family of lions over there," said the German, as soon as he was out of earshot. "One out of every ten of those ant-hills is not an ant-hill."

"Per Baccho!" exclaimed Pantalacci, "you need not have told him not to go too close." And, noticing that Bardik and Li were listening, he added, "He'll get awfully scared, and we shall have the pleasure of a good laugh at him."

The Italian was wrong. Cyprien was not the man to get "awfully scared," as he phrased it. A couple of hundred yards from the "ant-hill" he saw what it was. An enormous lion, a lioness, and three pups were stretched on the ground like cats, and quietly sleeping in the sun.

At the sound of Templar's hoofs the lion opened his eyes, raised his huge head, and yawned. As he did so, there appeared between the two rows of powerful teeth, a deep, wide throat, down which a child might easily have dropped. Then he glared at the horseman, who had pulled up about twenty yards away.

Fortunately the lion was not hungry, and so he did not trouble himself to move.

Cyprien, with his hand on his rifle, waited for a minute or two, and then, seeing that the lion had no desire to commence hostilities, and not having the heart to spoil the happiness of the interesting family, turned around, and ambled off to his companions, who could not help recognizing his coolness and pluck.

"I should have lost my bet, Mr. Hilton," was all he said.

That evening they halted near the right bank of the

Limpopo. There, in spite of all that Hilton could say Friedel went out to fish.

"It is a dangerous game, I tell you," said the Englishman. "In the Bush Veld people never hang about watercourses after sundown. Never—"

"So!" said the German. "Well, then, I'll be different."

"What harm can there be," said Pantalacci, "in his going down to the river-bank for an hour or two? I have often spent half the day wet through to the armpits when I have been after wild duck."

"That is not at all the same thing," said Hilton, again endeavoring to stop Friedel.

"Oh! Bother!" answered the Italian. "My dear Hilton, just hand us over that tin of scraped cheese for the macaroni, and let our friend go and catch us a few fish for supper. We want a change!"

Friedel went off, and kept his line in so long that it was quite night when he returned. Then he made a hearty meal off the fish he had caught, and when he went to bed in the wagon, complained of a slight shivering. In the morning when they rose to depart, he was in a violent fever, and found it impossible to mount his horse. Nevertheless, he insisted on their starting, affirming that he would be all right on the straw. They did as he requested.

At noon he was delirious.

At three o'clock he was dead!

"You see," said Hilton philosophically, "I was right when I said that you mustn't hang about water-courses after sundown."

They halted for a few minutes to bury the corpse, that they could not leave to the mercy of the wild beasts. It was that of a rival, perhaps of an enemy, and yet Cyprien felt profoundly moved as the last sad rites were accomplished. The spectacle of death, solemn and impressive as it is everywhere, seemed to gain increased solemnity in the desert, for in Nature's presence man is more fully conscious of his own inevitable end. Far from his friends, far from all who loved him, his melancholy thoughts flew back to home. "Perhaps," thought he, "I myself may lie on this plain, never again to rise; perhaps I may be buried in a sandhill, capped with a bare stone, and have no friend to soothe my last moments." And thus putting

himself in his comrade's place, and pitying him, he felt as though a part of himself lay buried there.

The day after the mournful ceremony Friedel's horse was seized with the Veld disease, and in a few hours followed his master to the grave.

CHAPTER XIV

THE NORTH OF THE LIMPOPO

THREE days elapsed before a ford could be found across the Limpopo. Even then it probably would not have been discovered, had not some Macalacca Kaffirs undertaken to act as guides.

These Kaffirs are the subject race held in slavery by the Bechuanas as the Helots were by the Spartans of old —made to work without pay, treated with great severity, and, worse than all, forbidden to eat any flesh. The unhappy Macalaccas can kill as many birds as they please, but only on condition that they hand them over to their masters.

A Macalacca possesses nothing of his own, not even a hut or a calabash. Lean and half starved, he goes about nearly naked, with a bandolier over his shoulders, serving him for a water-bottle, made of buffalo intestines, and looking at a distance like yards of black pudding.

Bardik's commercial genius was soon displayed in the consummate art with which he extracted from these savages the avowal that, in spite of their misery, they were the owners of sundry ostrich plumes, hidden away in a neighboring thicket. He immediately proposed to buy them, and an appointment was made for the bargain to be completed in the evening.

"You have some money with you, then, to give them in exchange?" asked Cyprien, much surprised.

And Bardik, with a broad grin, showed him a handful of brass buttons which had taken him a month or so to collect.

"That is not proper money," said Cyprien, "and I cannot allow you to pay these poor people with a few old buttons."

But he found it impossible to make Bardik understand in what way his idea was reprehensible.

"If the Macalaccas accept my buttons in exchange for their feathers, what is there to find fault with?" he answered. "You know that the plumes have cost them nothing to collect—they have not even a right to keep them, and can only show them to us on the sly. But a button is something useful, more useful than an ostrich feather. Why, then, do you stop me from offering a dozen for a dozen plumes?"

The reasoning was specious, but worthless. What the Kaffir did not see was that the Macalaccas took the brass buttons, not for the use they would make of them, but for the supposed value they attributed to the metal disks which resembled coins so much in shape. And therein lay the wrong.

Cyprien, however, saw that the distinction was too refined to be grasped by the intelligence of the savage, and so he had to leave him to act as he pleased.

In the evening, by torchlight, Bardik's bartering was resumed. The Macalaccas were evidently afraid of being taken in by their friend, and not satisfied with the fires prepared by the whites, brought with them a number of corn cobs, which they lighted and stuck in the ground.

They then brought forward the ostrich plumes, and proceeded to examine Bardik's buttons. And then began with much shouting and gesticulation a most animated debate on the nature of these pieces of metal.

What they said was unintelligible to all except themselves, but from their excited faces, eloquent grimaces, and occasional serious outbursts of anger, it was obvious that the debate was one of much interest to them.

Suddenly the impassioned discussion was interrupted by an unexpected apparition.

A tall black, wearing an old red cotton mantle and the usual diadem of sheep-gut of the Kaffir warriors, stalked out of the thicket where the bargaining was going on, and with his spear struck away right and left at the Macalaccas thus taken in the very act of disobedience.

"Lopepe! Lopepe!" yelled the unfortunate savages, scattering on all sides like a lot of rats.

But a ring of black warriors appeared from among the

bush-clumps surrounding the camp and barred their passage.

Lopepe immediately possessed himself of the buttons. After carefully examining them by the light of the maize torches, he dropped them with signs of much satisfaction into his leather pouch. Then he stepped up to Bardik, and taking away the feathers that had already been handed over, he appropriated them in the same way as he had done the buttons.

Of this scene the whites had remained passive spectators, having no excuse for interfering in it. Lopepe, however, solved the difficulty by advancing toward them, stopping a few paces off, and in an imperious tone delivering a long address, which was almost unintelligible.

Hilton, understanding a few words of Bechuana, succeeded in catching its general drift. The Kaffir chief protested against Bardik being allowed to trade with the Macalaccas, when they possessed no property of their own, and expressed his intention of confiscating what he had found as contraband, and asked what they were going to do.

Opinions were divided. Pantalacci wished to give in at once rather than cause a disturbance with the Bechuanas. Hilton and Cyprien were afraid that by doing so Lopepe's arrogance would be encouraged, and still greater risk run in consequence.

After a short whispered consultation it was agreed to abandon the buttons to the Bechuana and to claim the feathers, and this Hilton explained to the chief in a few Kaffir words eked out by pantomime.

Lopepe then assumed a diplomatic air, and seemed to hesitate; but the guns he caught sight of in the gloom soon decided him, and the plumes were given up.

Then the chief, who was really a very intelligent fellow, made himself somewhat more agreeable to the three whites, and to Bardik and Li he offered a pinch from his tobacco-pouch, and then sat down at the bivouac. A glass of something offered him by the Neapolitan put him into excellent humor, and when he rose, after an hour or so, during which silence not unfrequently reigned for minutes at a time, it was to invite the travelers to visit him in the morning at his kraal.

This was promised, and after shaking hands Lopepe majestically retired.

He had not been gone long before all in camp were asleep except Cyprien, who, wrapped in his blanket, lay gazing at the stars. There was no moon, but the black field of the sky was aglow with its glittering dust.

He thought of his people, who knew nothing of this plunge of his into the South African desert. He thought of Alice, dearer than all to him, who was, perhaps, at that moment star-gazing, as he was; and sinking deeper and deeper into his reverie, he was about to fall asleep, when a trampling of hoofs, a curious agitation on the side where the bullock team was parked for the night, made him wake up and start to his feet.

In the shadow Cyprien fancied he saw a dwarfish figure, more compact than that of the oxen, and this he took to be the cause of the agitation. Without a thought as to what he was doing, Cyprien seized a whip lying close by, and stealthily moved toward the cattle.

He was not mistaken. In their midst, come to trouble their sleep, crept an intruder. Hardly awake, and not thinking what he did, Cyprien raised the whip and brought it down with full force on the animal's snout.

A fearful growl arose as the reply to this sudden attack.

It was a lion! and the young engineer had treated it as if it were a cur.

He had only just time to snatch a revolver from his belt and step aside as the lion came leaping on to him and seized his outstretched arm. Cyprien felt the pointed teeth grip into his flesh, and was borne to the ground by the angry beast. Suddenly there was an explosion, the lion's body gave a last writhe, stiffened, and fell back motionless.

With the hand that remained free Cyprien had coolly aimed his revolver at the monster's ear, and an explosive bullet had shattered its head.

The sleepers, aroused by the growling and the report, came running on to the battle-field. Cyprien was half crushed under the weight of the beast, but his wounds were merely superficial. Li bathed them with a little lint steeped in brandy, and then the best place on the floor of the wagon was given up to the wounded man, and soon

all were again asleep except Bardik, who remained on guard till the morning.

The day had hardly broken when the voice of James Hilton, begging his comrades to come to his aid, proclaimed that something else had happened. Hilton was lying fully dressed on the front of the wagon across the tarpaulin, and in an accent of the keenest terror told them, without daring to move, "I have got a snake curled around my right knee under my trousers. Don't move, or I am a lost man. But see what you can do for me."

His eyes were dilated by fright, and his face was of livid paleness. Under his trousers and around his knee was some foreign body, like a piece of rope rolled around the limb.

The situation was serious. As Hilton had said, the first movement he made the snake would strike him.

But amid the general indecision Bardik resolved to act. Having noiselessly drawn his master's hunting-knife, he approached Hilton by a sort of worm-like movement that brought him almost imperceptibly toward him. Then with his eyes at the level of the snake he seemed for some seconds to carefully study the position of the dangerous reptile. Obviously he sought to discover how the animal's head was placed.

Suddenly, by a quick movement, he rose. His arm dashed down, and the knife gleamed as it cut in deeply across Hilton's knee.

"You can knock off the snake. He is dead!" said Bardik, showing all his teeth in a gigantic smile.

Hilton obeyed mechanically, and shook his leg. The reptile fell at his feet. It was a viper, and had a black head about an inch across. Its least bite meant death. The young Kaffir had decapitated it with marvelous precision. Hilton's trousers had a gash in them about six inches long, but his skin was not even grazed.

It was a curious thing that Hilton did not appear to dream of thanking Bardik. Now that he was out of danger, he seemed to consider the intervention quite as a matter of course. The idea never occurred to him to seize the Kaffir's hand and tell him he owed him his life.

"Your knife is very sharp," was all he said, as Bardik

replaced it in his sheath, without appearing to think very much of what he had done.

The impressions of this eventful night all faded off during breakfast, which on this occasion consisted of a single ostrich egg cooked with butter, and quite sufficient to satisfy the appetites of the five travelers.

Cyprien had a slight fever, and his wounds were somewhat painful. He insisted, notwithstanding, on joining Pantalacci and Hilton in their visit to Lopepe's kraal. The camp was thus left to Bardik and Li, who undertook to skin the lion—quite a monster of the so-called dog-muzzle species.

The Bechuana chief awaited his guests at the entrance of his kraal, surrounded by his warriors. Behind them, in the second rank, were grouped the women and children, eager with curiosity to look on the strangers. A few affected indifference. Seated in front of their hemispherical huts they continued at their work. Two or three were making a net with some long textile weeds twisted into string.

There was a general look of misery about everything, although the huts were fairly built. That of Lopepe was raised a little in the center of the kraal. It was much larger than the others, and covered with straw mats.

The chief led his guests inside, pointed to three stools, and seated himself on one in front of them, while the guard of honor formed a circle behind him.

The interview began with the usual interchange of civilities; in short, the ceremonial mainly consisted of drinking a cup of fermented liquor, made by the host himself, and each time the chief, to show that no perfidious scheme lurked behind, first raised the cup to his own thick lips before passing it to his visitors. Not to drink after such a gracious invitation would have been a deadly insult. The three whites drank the Kaffir beer, not without violent grimacing on the part of Pantalacci, who said in a whisper that he would rather have had "a glass of spirits than this nasty brew of the Bechuanas."

Business then began. Lopepe wished to buy a gun; but this was a satisfaction they could not grant him, although he offered for it a very passable horse, and a

hundred and fifty pounds of ivory. In fact, the colonial edicts are very strict on this point, and forbid Europeans disposing of any weapons to the Kaffirs on the frontier, except under special authority from the Government. To make up for this, Lopepe's guests had brought him a flannel shirt, a steel chain, and a bottle, which constituted a splendid present, and gave great pleasure.

The Bechuana chief, through Hilton, was only too happy to furnish all the information in his power. In the first place a traveler, answering in every respect to Mataki, had passed the kraal five days before. This was the first news the expedition had had of the fugitive for a fortnight, and it was received with gratitude. The young Kaffir had lost several days searching for the ford across the Limpopo, and now he was making for the mountains to the north. Would it take him many days to reach the mountains? Seven or eight at the least!

Was Lopepe the friend of the chief of the district to which Cyprien and his friends were going?

Lopepe gloried in being so! Who would not be the friend and ally of the great Tonaia, the invincible conqueror of the Kaffir lands?

Would Tonaia give a good welcome to the whites?

Yes, because he knew, like all the other chiefs, that the whites never failed to take vengeance when those belonging to them were hurt. What was the good of fighting the whites? Were they not always the stronger, thanks to the guns which loaded themselves? The best thing was to remain at peace with them, to receive them cordially and trade loyally.

Such was what was ascertained from Lopepe. One thing only was of much importance, and that was that Mataki had lost several days on the road, and that they were still on his track.

On returning to the camp, Cyprien, Pantalacci, and Hilton found Li and Bardik considerably alarmed. They had, they said, received a visit from a lot of Kaffirs of a different tribe from that to which Lopepe belonged, and these had subjected them to a strict cross-examination.

"Whence came they? Were they not spying on the Bechuanas, collecting information about them, finding out their number, force, and equipment? It was not for

strangers to engage in such an enterprise! The great chief Tonaia would have nothing to say so long as they did not enter his territory, but he would look on things with a different eye if they did cross his frontier."

This was the general drift of their remarks. The Chinese did not seem to be unreasonably scared. But Bardik, usually so composed, was suffering from quite a serious fright, and this Cyprien could not understand.

"Wicked warriors," he said, rolling his large eyes, "warriors who hate the whites and their 'be-quick'!"

What was to be done? Was much importance to be attributed to the incident? No! The warriors had done no harm and shown no disposition to pillage. Their threats were harmless. The great chief Tonaia only wanted a few civil remarks and explanations as to what really had brought the white men into the country, and all his suspicions would vanish and his good wishes would be gained.

It was agreed by all that they should keep on. The hope of catching Mataki and recovering the diamond overshadowed all other anxieties.

CHAPTER XV

A PLOT

In another week the expedition arrived in a country which in no way resembled that they had traversed since leaving Griqualand. They were nearing the mountain chain to which Mataki had fled. The approach to the highlands whence the numerous water-courses flowed down to the Limpopo, was signaled by a flora and fauna differing entirely from those of the plain.

One of the first of these valleys was reached about sunset. A river, so limpid that they could see down to its bed, flowed through meadows of emerald green. Fruit trees, with varied foliage, clothed the slopes of the hills which circled around it. The plain in the center lay bathed in the sunshine, and beneath the shadows of the huge baobabs grazed herds of red antelopes, zebras, and buffaloes. A little farther off a white rhinoceros crossed the open, and slowly moved toward the river, snorting with

joy at the thought of rolling his mass of flesh in the cooling stream. An onager was braying, and a troop of monkeys were chasing each other among the trees.

Cyprien and his two companions stopped on the top of the hill to contemplate the unaccustomed scene. At last they had reached the virgin country, where the wild beast, still the undisputed master of the soil, lived on in happiness, without a suspicion of danger. It was not so much the number of the animals that surprised the engineer, as the wonderful variety. It seemed like a diagram in which the painter had depicted each principal type of the animal kingdom.

Of other inhabitants there were few. The Kaffirs could not but be well scattered in a district of such extent. Cyprien felt that his artistic and scientific instincts were fully satisfied, and allowed himself to think that he had been transported into the pre-historic age of the megatherium.

"It only wants a mammoth or two to make the scene complete!" he exclaimed.

And immediately Li extended his arm and pointed to several gray masses in the distance. From afar they looked like rocks in their motionlessness and color. They were a troop of elephants. The plain was dotted with them for a space of several miles.

"You know something about elephants?" asked Cyprien of the Chinaman when they were halting for the night.

Li blinked his little oblique eyes. "I lived a couple of years in Ceylon as hunter's help," said he, with the marked reserve he maintained as to all that concerned his biography.

"If we could only bring down one or two!" exclaimed Hilton. "It is excellent sport."

"And the game is worth the powder," added Pantalacci. "The tusks are excellent booty, and we might easily carry three or four dozen behind the wagon. We might pay the costs of the expedition out of them."

"That is an idea, and a good one!" exclaimed Hilton. "Why should we not have a try tomorrow before we start?"

The question was discussed, and it was decided that they would strike the camp at daylight, and try their for-

tune in the valley in which they had seen the elephants.

As soon as supper was over, they all retired under the tilt of the wagon with the exception of Hilton, whose turn it was to keep watch. He had been alone about two hours, and was beginning to nod, when he felt a light touch on his elbow. He opened his eyes. Pantalacci was seated by his side.

"I could not sleep, and I thought I would keep you company," said the Neapolitan.

"It is very kind of you, but I could do with a few hours' sleep," answered Hilton, stretching his arms. "If you like, we can arrange matters. I will take your place under the tilt, and you can stay here."

"No, stop here. I have something to tell you," answered Pantalacci in a low voice.

He cast a glance around to see that they were alone, and continued, "Have you ever hunted an elephant?"

"Yes," answered Hilton, "twice before."

"Well, you know it is a very dangerous business. The elephant is so ready and so well armed. A man does not always get the best of it against him."

"You speak of the clumsy men," said Hilton. "With a good gun and explosive bullets there is little to fear."

"So I should think," replied the Italian. "But there are such things as accidents. Suppose one was to happen to the Frenchman tomorrow; it would be a sad blow to science!"

"A great misfortune!" said Hilton, with a laugh.

"But for us the misfortune would not be so great," continued Pantalacci, encouraged by the laugh. "There would only be two of us then to follow Mataki and his diamond, and between us we might—"

The two men remained silent, gazing into the fire, each thinking out the dastardly idea.

"Yes," said the Neapolitan; "two can understand each other, but three cannot."

Again there was silence. Suddenly Pantalacci lifted his head and gazed into the darkness around him.

"Did you see anything?" asked he in a whisper. "I thought I saw a shadow behind that baobab."

Hilton looked in the direction indicated, but noticed nothing suspicious.

"There is nothing there," he said, "only the linen the Chinaman has put out to bleach."

Soon the conversation was resumed between the conspirators, but in a whisper.

"I can draw the cartridges out of his gun without his knowing it," said Pantalacci; "and when we ride up to the elephant, I can fire behind him, so as to attract the brute's attention that way, and then it would not take long!"

Hilton feebly objected, "It may not be so easy as you think."

"Bah!" replied the Italian. "Leave me alone, and you will see."

An hour later, when Pantalacci resumed his place among the sleepers, he lighted a match to assure himself that no one had moved. All was well. Cyprien, Bardik, and the Chinaman were sound asleep.

At least, they seemed to be. But if the Italian had been a little more artful, he might have suspected a certain artificiality about the energetic snoring of the Chinee.

At daybreak all were afoot. Pantalacci took advantage of Cyprien's bathing in the river to extract the cartridges from the gun. It took him but twenty seconds to do this. He was alone; Bardik was making the coffee, and Li was collecting the clothes he had put out to bleach on the famous line he had stretched between a couple of baobabs. Assuredly no one had seen him.

The coffee having been finished, the party went off on horseback, and left Bardik in charge of the camp. Li had asked to accompany the hunters, and armed himself with his master's knife.

In less than half an hour they reached the spot where, the evening before, they had seen the elephants. But now they had to go farther on, out into the open between the foot of the mountain and the right bank of the river, before they came up with them.

In the clear fresh atmosphere illuminated by the rising sun, on the wide stretch of verdant carpet, wet with the morning dew, a group of elephants, two or three hundred in number, were busy breakfasting. The youngsters were playing around their mothers. The old ones, with heads

to the ground, swinging their trunks as they strolled along, were quietly feeding on the thick grass of the meadow. Nearly all were flapping their huge ears as if they were cloaks of leather, fanning from side to side like Indian punkahs.

There was in all this calm domestic happiness something so sacred that Cyprien was profoundly moved, and asked his companions to abandon their projected massacre.

"What is the good of killing the inoffensive creatures?" he said. "Better leave them in peace."

But the proposition was not to the taste of Pantalacci. "What is the good?" he asked, with a grin. "The good is to fill our purses, to get a few hundredweights of ivory! Are you afraid of those big fellows, Mr. Cyprien?"

Cyprien shrugged his shoulders, and took no further notice of the impertinence. As he saw the Neapolitan and his companion continue their advance toward the clearing, he went with them.

And now they were within a couple of hundred yards of the elephants. If, with their fine sense of hearing, the victims had not noticed their approach, it was because the wind blew toward the hunters, who were advancing through a thick clump of baobab trees.

However, one of the elephants began to show signs of disquietude, and raised his trunk interrogatively.

"Now is the time," said Pantalacci, in a whisper. "If we are to do any good, we had better scatter; let each take his own position, and we will fire together at an agreed signal; for at the first shot the whole troop will take to flight."

The advice was adopted. Hilton moved off to the right, Pantalacci to the left, and Cyprien remained in the center. Then the march toward the clearing was silently resumed.

At this moment Cyprien was much surprised to find himself grasped in somebody's arms, and to hear the voice of the Chinaman, "I have just jumped up behind you. Say nothing. You will soon see why."

He had then reached the edge of the underwood, and found himself about thirty yards from the elephants. Already he lifted his gun, to be ready for what might happen. As he did so, the Chinaman whispered, "Your

gun is not loaded! Never mind. It's all right!" At the same instant there came the sound of a whistle—the signal of the attack—and immediately a gun, only one gun, was fired behind Cyprien.

Turning quickly, Cyprien saw Pantalacci gliding behind a tree. But at the instant his attention was called off in front of him.

One of the elephants had been hit, and, infuriated by his wound, came charging toward him. The others, as the Neapolitan had foretold, were off in flight in a terrible stampede that shook the ground for a mile or more.

"All right!" said Li, clutching tightly to Cyprien. "When he comes closer, jump Templar aside. Then turn around that bush, and cut, with the elephant after you. I will look after him!"

Cyprien mechanically obeyed the orders. He had barely time to do so. With trunk erect, eyes shot with blood, mouth open, and tusks at the charge, on came the elephant with fearful speed.

Templar behaved like an old campaigner. Obeying the pressure of the rider's knee, he executed a violent swerve to the right, and the elephant shot past, without touching him, straight across the spot the horse that moment had left.

Without a word the Chinaman slipped to the ground and leaped behind the bush he had shown his master.

"Here! here! Turn around the bush! Let him follow you!" he shouted.

The elephant rushed back, more furious than ever from having failed in his first attack. Cyprien, though he did not understand Li's maneuver, executed it most carefully. He galloped around the bush, followed by the panting elephant, and twice foiled his attack by a sudden swerve. But would the maneuver succeed in the long run? Did Li hope to tire out the animal?

This did Cyprien ask himself, without being able to reply; when suddenly, to his great surprise, the elephant fell on his knees.

Li, with incomparable address, had seized on the propitious moment, glided from the bush up to the very feet of the pursuer, and with one sweep of the hunting-knife had cut the heel tendon which in man is called the

Achilles. Such is the usual practice of the Indian huntsmen, and the Chinaman, thanks to his experience in Ceylon, had been able to deal the stroke with marvelous coolness and precision.

Fallen and helpless, the elephant remained without a movement, with his head laid down among the grass. A stream of blood flowed from his wound, and with it his strength flowed away.

"Hurrah! Bravo!" exclaimed Pantalacci and Hilton, appearing on the scene.

"We must finish him with a shot in the eye," said Hilton, who seemed to feel an irresistible desire to take some active part in the drama.

And saying so, he shouldered his gun and fired.

The instant the explosion was heard, the bullet was imbedded in the body of the elephant. Then came a last convulsion. Then he remained motionless, as if he were a piece of gray rock.

"All over!" exclaimed Hilton, riding close up to the animal to get a better view of him.

"Wait! wait!" said the Chinaman, with a look.

They had not long to wait. As soon as Hilton reached the elephant, he stood up in his stirrups, and in derision tried to lift one of the enormous ears. But the animal by a sudden movement hurled aloft his trunk, and with one mighty blow brought it down on the hunter, smashing his backbone and crushing his head before the affrighted witnesses of the horrible scene could snatch him away.

Hilton uttered but one sharp cry of pain.

In three seconds he was but a mangled mass of flesh, on which the elephant had fallen, never to rise again.

"I was sure he would kill him!" said the Chinaman shaking his head. "Elephants never fail, when they get a chance."

Such was the funeral oration on James Hilton. The young engineer thought of the treason of which he was to have been the victim, and could not help recognizing in the death a just punishment for the share in the plot to deliver him over defenseless to the fury of the angry beast. Whatever were the thoughts of the Neapolitan, he deemed it best to say nothing.

The Chinaman was already digging down into the grass of the prairie, and, with the aid of a knife, scooping out the grave in which, with Cyprien's aid, the corpse was placed. All this took some time, and the sun was high above the horizon when the three hunters returned to the camp.

When they reached it, Bardik had disappeared.

CHAPTER XVI

TREASON

WHAT, then, had passed in camp during the absence of Cyprien and his two companions? It was difficult to say, for the young Kaffir did not reappear.

They waited for Bardik, they shouted for Bardik, and they looked for him everywhere. Not a trace of him could they find. The breakfast he had got ready remained by the fire, which had gone out, and seemed to show that he had been away from two to three hours.

Cyprien was reduced to conjectures, but the conjectures did nothing toward an explanation. That the young Kaffir had been attacked by some wild beast was not improbable, but there was not a sign of any struggle having taken place. That he had deserted and gone back to his own country, as Kaffirs often do, was very unlikely, and the engineer absolutely declined to accept the hypothesis when proffered by Pantalacci.

To sum up, half a day was spent in search, yet the young Kaffir had not been found, and his disappearance remained absolutely inexplicable.

Pantalacci and Cyprien took counsel together. They decided to wait till the next day before they struck the camp. Perhaps in the interval Bardik, if he had only wandered off, might return. But in thinking matters over, particularly with regard to the visit of the Kaffirs to one of the previous camps, and the questions they had put to Bardik and Li, they could hardly help asking if Bardik had not fallen into the hands of the natives, and been taken by them to their capital.

The day ended sadly, and the evening was even more lugubrious. A breeze of misfortune seemed to play over

the expedition. Pantalacci was savage and dumb. His accomplices, Friedel and Hilton, were dead, and now he alone remained to face his young rival. But he was more than ever resolved to get rid of him.

Cyprien—whom Li had told all that he had heard about the withdrawal of the cartridges—had now to watch night and day over his traveling companion, though the Chinaman intended to share the task with him.

Cyprien and Pantalacci passed the evening silently smoking, and retired under the wagon-tilt without even a "good-night." It was Li's turn to watch near the fire and keep off the wild beasts.

The morning came, and the young Kaffir did not return. Cyprien would have waited four-and-twenty hours longer, to give his servant a chance of rejoining, but the Neapolitan insisted on an immediate departure.

"We can very well do without Bardik, and to stop here is to risk being unable to rejoin Mataki."

Cyprien gave in, and the Chinaman set to work to put-to the team. And here came a discovery, and a serious one. The cattle were not to be found! The evening before, they had been sleeping in the high grass around the camp. Now they were nowhere visible.

And then they became fully aware of the loss the expedition had sustained in the person of Bardik. If that intelligent servant had been at his post, knowing as he did the peculiarities of the South African ox, he would not have omitted tying up to trees or pegs the beasts that had had a day's rest. Usually when reaching the halting-places after a long march, the precaution was unnecessary; the tired cattle never thought of straying beyond the outskirts of the wagon. But it was different after a day of rest and feasting.

Evidently the beasts' first care on awaking had been to seek for more delicate grasses than had satisfied them the day before. For the sake of mere wandering they had strayed off little by little, lost sight of the camp, and then, guided by that peculiar instinct that always leads them home, were probably on their way back again to the Transvaal.

The disaster is not an unusual one in Africa, but it is none the less serious. Without the team the wagon is

useless, and the wagon is for the traveler his house, his store, and his fortress.

Great was the disappointment of Cyprien and Pantalacci when, after a wild chase of two or three hours along the track of the cattle, they found they must give up all hope of recovery. The position was thus changed greatly for the worse, and another consultation was held.

Only one practical solution could be arrived at, and that was to abandon the wagon, take as much provision and ammunition as they could carry, and continue the journey on horseback. If circumstances were propitious, they might be able to meet with some Kaffir chief, and from him buy a new team. As for Li, he could have Hilton's horse, which now wanted a master.

A lot of the thorn-tree branches were then cut and stacked over the wagon, so as to hide it in a kind of artificial bush. Their food and ammunition were stowed away in their pockets and in the large linen bag which each carried. The Chinaman, to his great regret, had to abandon the famous red box, but he could not tear himself away from his cord, and so he coiled it around his waist under his shirt as if it were a belt.

All being ready, the three horsemen gave a last look into the valley which had been the scene of such tragic events, and then set out for the hills. The road, like the others in this country, was merely a path formed by the wild animals, who always take the shortest road to water.

It was past noon when Cyprien, Pantalacci, and Li started; and beneath a burning sun they kept on at a good pace till the evening. Then they camped in a deep gorge, and, well sheltered by a rock, and seated around a fire of dry wood, they said to themselves that after all the loss of the wagon was not irreparable.

For two days they continued their journey, fully persuaded that they were on the track of him they sought. And on the evening of the second day, just before sundown, as they were making for a clump of trees ahead of them, in which to camp, Li uttered a guttural exclamation of, "Heugh!" and pointed with his finger to a black figure which had moved into view on the horizon in the streaks of the twilight.

Cyprien and Pantalacci looked in the direction indicated

by the Chinaman. "A traveler!" remarked the Italian.

"Mataki himself!" said Cyprien, looking through his glasses. "I can see his carriage and his ostrich."

And he handed the glasses to Pantalacci for him to satisfy himself that it was so.

"How far off is he?" asked Cyprien.

"Seven or eight miles at the least; perhaps ten," was the reply.

"Then we must give up any hope of catching him today."

"Certainly," said Pantalacci. "In half an hour it will be dark, and we could not think of moving then."

"Good! Tomorrow we will start early and catch him."

"That is what I say."

The horsemen reached the trees and dismounted. As usual, they began by carefully rubbing down and seeing to their horses before tethering them where they were to feed, the Chinaman being busy lighting the fire.

Night came on while they were so employed. The meal was a little more cheerful perhaps than it had been for the last three days. As soon as it was over, the travelers rolled themselves in their wraps and lay down by the fire, with their saddles for pillows, to sleep till dawn.

Cyprien and the Chinaman were soon asleep—not a very prudent proceeding perhaps on their part.

The Italian did not sleep. For two or three hours he rolled and twisted about in his wrapper like a man laboring under some fixed idea. Temptation had again come to him. At last he could withstand it no longer. He rose stealthily and silently, went to the horses, and saddled his own; then setting free Templar and the Chinaman's horse, he led them after him. The grass which carpeted the ground stifled the sound of the hoofs, and the animals followed in stupid resignation at being so suddenly awakened. Pantalacci took them down into the valley below the camp, fastened them to a tree, and returned. Neither of the sleepers had moved.

He took his rifle, his ammunition, and some provisions. Then he coolly and deliberately abandoned his comrades in the desert.

The idea which had possessed him since sundown had been that by seizing the horses Cyprien and Li would be

prevented from reaching Mataki. He thus made sure of victory. Neither the odious character of the treason, nor the utter heartlessness of the robbery, had any influence over him. He descended the slope, jumped into the saddle, and rode off with the two horses in the first rays of the rising moon, that was just peeping over the distant hills.

Cyprien and Li slept on. About three o'clock in the morning the Chinaman opened his eyes, gazed at the stars growing dim on the eastern horizon, and said to himself, "It is time to get the coffee!"

And immediately he threw off his blanket, jumped up, and set about his morning toilet, which in the desert, as in the town, was anything but elaborate.

"Where is Pantalacci?" he asked himself as he glanced around.

The day had begun to break, and the objects around were growing clearer in the light.

"The horses are not there!" said Li to himself. "Perhaps our gallant friend has—"

And suspecting what had happened, he ran up to the pegs to which he had seen the horses tethered the night before. Then he ran back to the camp, and at a glance assured himself that the Neapolitan's baggage had gone with him.

There could be no mistake.

A white man would probably have been unable to resist the temptation of waking Cyprien to tell him the important news. But the Chinese was of the tawny race, and thought there was no need to hurry in telling bad news. And he quietly set to work to get the coffee, remarking as he did so, "It was very kind of the gentleman to leave a little behind him!"

The coffee having been strained through the linen bag he had made for it, Li filled two cups cut out of ostrich eggs, and went up to Cyprien, who was still asleep. "Here is your coffee, Pa," said he, touching him on the shoulder.

Cyprien opened his eyes, stretched his limbs, smiled at the Chinaman, drew himself up, and drank the steaming liquor.

It was not till then that he noticed the absence of the Italian. "Where is Pantalacci?" he asked.

"Gone away," answered Li, in the most natural way in the world, as if there was nothing at all unusual in his doing so.

"What! Gone away?"

"Yes, Pa—with the three horses."

Cyprien threw off his rug and gave a glance around, which told him everything.

But he was too proud to show his anxiety or his anger. "Very well," he said. "The fellow fancies he has seen the last of us, I suppose;" and he walked briskly to and fro, and thought. "We must be off at once," he said to the Chinaman. "We must leave the saddles and bridles, and all that would encumber us, and take only the guns and the food we have left. We may get on quicker unmounted, and perhaps find the shortest roads."

Li hastened to obey. In a few minutes the rugs were rolled up and the bags shouldered, and then all that it was necessary to abandon were heaped together and hidden under a pile of brushwood.

Cyprien was right in supposing that, under certain circumstances, it would be better to travel on foot. He could go a nearer way, and climb heights that a horse was unequal to, but at the cost of what fatigue!

About one o'clock in the afternoon they reached the northern slope of the chain they had been following for three days. According to the information given by Lopepe, they could not be very far from Tonaia's capital. Unfortunately in the Bechuana language the indications were so vague as to the route to follow and the distance, that Cyprien was not sure if he had to travel two days or five days before he reached the kraal.

As he and Li were descending into the first valley, after crossing the ridge, the latter gave a short, sharp laugh. "Giraffes!" he said.

Cyprien looked below and saw about a score of these animals feeding in the valley. Nothing could be more graceful from afar than their long necks, held upright like masts, or thrust like long serpents into the herbage for two or three yards from their brown-spotted bodies.

"We might catch one of those things to take the place of Templar," observed Li.

"Ride a giraffe! Whoever saw such a thing?" exclaimed Cyprien.

"I do not know if any one ever saw it, but that is no reason why you shouldn't see it," answered the Chinaman. "And so you shall, if you let me try!"

Cyprien, who had begun by thinking it impossible, ended by promising to help.

"We are to leeward of the giraffes," said Li; "that is lucky, for they have very quick noses, and would have smelled us. You go away to the right and frighten them with the report of the gun, so as to drive them this way, and I will look after the rest."

Cyprien dropped on the ground all that could hamper his movements, and hurried off.

Li lost but little time. He ran down the valley and reached a track along the bottom. This was evidently that used by the giraffes, for it was all marked with their hoofs. The Chinaman took up his position behind a large tree. He then unwound his long cord, which he was never without, and, cutting it in two, made two lengths, each of about a hundred feet. To one end of each of these he tied a heavy pebble, and the other ends he hitched to the lower branches of the tree. Then he coiled the free ends over his arm, stepped behind the tree, and waited.

Five minutes had barely elapsed when the report of a gun sounded some distance off. Instantly a swift trampling began, as of a squadron of cavalry at the charge, and this increased from moment to moment, and announced that the giraffes were coming, as Li expected. They came right down on him along the track, little suspecting what was awaiting them.

With their nostrils dilated, their heads bristling, and their tongues hanging out, the giraffes looked really superb, but Li had something else to do than admire them. His post had been judiciously chosen at a narrowing of the way, where the animals could only pass two abreast, and where they would be sure to crowd.

He let two or three go by. Then, picking out one of extraordinary size, he flung his first cord. It whistled as

it flew and swung around the victim's neck. Suddenly the cord stretched, squeezed the throat, and pulled the giraffe up short.

The Chinaman lost no time in looking on. Scarcely had he seen his first cord strike than he launched the second, and brought down another giraffe.

All was over in half a minute. The frightened herd escaped in all directions, and two half-strangled giraffes remained prisoners.

"Come on, Pa!" shouted the Chinaman, as Cyprien ran up, rather doubtful of the success of the scheme.

But the evidence was too much for him. There were two magnificent animals, strong, fleshy, with splendid hams and lustrous necks. But Cyprien thought only of admiring them; to ride them did not seem possible.

"How can you hang on a ridge which slopes at thirty degrees?" asked he, with a laugh.

"By sitting on the shoulders, and not on the flanks," answered Li. "Besides, we can roll up a blanket to put under the saddle."

"We have not got a saddle."

"I will soon find you one."

"And what is your bridle to be?"

"You'll see." The Chinese had a reply for every question, and with him acts and words were not far apart.

The dinner-hour had not arrived before, with part of his cord, he had made two strong halters, which he slipped over the giraffes. The poor beasts were so frightened at their misfortune, and were, besides, so gentle in disposition, that they made no resistance. The other end of the cord did for reins. This being finished, nothing was easier than to lead off the prisoners. Cyprien and Li went back to the camp and repossessed themselves of the saddles and other articles they had abandoned.

By the evening everything was arranged. The Chinaman was a marvel of cleverness. Not only did he alter Cyprien's saddle so that it would seat him horizontally on the giraffe, but he made himself a saddle of twigs; and took the precaution of breaking in the giraffes during half the night, mounting first one and then the other, accustoming them to the rein, and teaching them that henceforth they must obey.

CHAPTER XVII

AN AFRICAN STEEPLECHASE

THE aspect of the horsemen—or rather the giraffemen—when they started in the morning, was curious in the extreme. It is very doubtful if Cyprien would have cared to have appeared in such guise before Miss Watkins in the chief street of Vandergaart Kopje. But in Rome, people must do as do the Romans. Our hero was in the desert, and giraffes were just as good mounts as dromedaries. Their gait was very much the same. Their backs were horribly hard, and they rolled and pitched in a way that nearly made their riders sea-sick.

In two or three hours Cyprien and the Chinee were sufficiently acclimatized, and after a few attempts at rebellion, which were promptly suppressed, the giraffes became quite docile, and sped along at a rapid pace.

The object now was to hurry on as much as possible, so as to make up for the time lost during the last three or four days. Had Pantalacci caught Mataki? Cyprien resolved that nothing should keep him from reaching him.

On the third day the giraffemen entered the plains. They were following the right bank of a much-winding water-course which flowed to the northward, and was probably one of the secondary affluents of the Zambesi. The giraffes, thoroughly subdued and weakened by the long stages and spare diet to which Li subjected them, were driven with the greatest ease. Cyprien could even let go the rope reins, and direct his steed by the mere pressure of his knee. Free from anxiety as to his mount, he took a good deal of pleasure in noticing around him the traces of advancing civilization. In one unbroken series there stretched away fields of manioc or taro, carefully tended, properly irrigated by means of bamboos placed end to end, and reached by broad and well-made roads. In fact, the district had an air of general prosperity. On the hills which bordered the horizon there appeared the groups of white huts, built of rushes, which served as the homes of its scattered population.

One thing that showed they were nearly out of the desert was the extraordinary number of wild animals

peopling the plain. Here and there innumerable swarms of birds, of all sizes and species, darkened the air. Herds of antelopes and gazelles crossed the road before them. Occasionally a monstrous hippopotamus lifted his head in the river, brayed noisily, and plunged again beneath the stream with a sounding splash.

The last thing in Cyprien's thoughts was what greeted his eyes as he turned the flank of one of the small hills. This was no less than Pantalacci at full gallop in pursuit of Mataki! About a mile separated the men from each other, and Cyprien and Li were some four miles behind the Italian.

The delight of the latter was unbounded. Cyprien gave a loud "Hurrah!" Li a sounding "Hyugh!" meaning the same thing, and then they put their giraffes at the trot.

Evidently Mataki had seen the Neapolitan, who had begun to gain on him, though he could not see his old master and his companion, who were still too far off over the plain.

The young Kaffir, at sight of Pantalacci—who was not a man to give quarter, and who, without waiting for explanations, might kill him like a dog—hurried along furiously in his ostrich cart. The swift bird almost flew over the ground. It flew at such a rate that it suddenly crashed up against a large stone. The shock was so violent that the axletree broke, one of the wheels slipped off, and Mataki and the bits of his chariot were scattered in the road.

The unfortunate Kaffir was dreadfully injured by his fall, but the fright that possessed him was only thereby increased. Convinced that he would be killed, if caught by the Italian, he picked himself up, caught the ostrich, jumped astride of its back, and sped off at a run.

And then began an exciting steeplechase, such as the world had never seen since the days of the Roman hippodrome, when ostrich and giraffe races formed part of the program. While Pantalacci chased Mataki, Cyprien and Li chased them both. They wanted the Kaffir for the sake of the stolen diamond, they wanted the Italian to settle accounts with him for his cowardly treachery.

The giraffes were given the reins. They swept along, almost as fast as thorough-bred horses, as with their long

necks stretched out, their mouths open, their ears flung back, they were spurred and whipped to their topmost speed.

Mataki's ostrich proved a prodigy. No winner of the Derby would have had a chance against him. His short wings, though useless for flying, helped him greatly. So fast did he speed over the ground that in a few minutes the young Kaffir had regained all he had lost.

Mataki had chosen his mount well when he took the ostrich. If he could only keep up as he was going for another quarter of an hour, he would be safe from the Italian's claws.

Pantalacci saw that the slightest halt would lose him all his advantage. Already the distance between him and the fugitive had sensibly increased. Beyond the mealy-field through which they were racing, a thick mass of lentisks and Indian figs lay waving in the wind and bounding the view. If Mataki once reached it, he would escape, as it would be impossible to keep him in sight.

At full gallop Cyprien and the Chinee followed in chase. They reached the foot of the hill; they were tearing across the field; but three miles still separated them from the Kaffir's pursuer.

They could see that by a great effort the Italian had gained a little on the fugitive. Whether it was that the ostrich was exhausted, or had hurt itself against a stone, its speed had greatly slackened. Pantalacci was not more than three hundred feet from the Kaffir.

But Mataki had reached the edge of the wood. Suddenly he disappeared, and at the same moment Pantalacci was violently thrown, and his horse bolted.

"Mataki has escaped!" said Li.

"Yes; but Pantalacci is ours!" answered Cyprien.

And they pressed on their giraffes still faster.

In half an hour they had nearly crossed the mealy-field, and were only five hundred yards from where the Italian had come to grief. Had he gained the wood, or did he lie on the ground grievously wounded—or perhaps dead?

The unhappy man was where he had fallen. A hundred paces from him Cyprien and Li reined up their giraffes. And this is what they saw.

In the ardor of his pursuit the Neapolitan had not

noticed a gigantic net which had been set by the Kaffirs to catch the birds that wage incessant war on their crops. In this net Pantalacci had become entangled.

And it was not a small net. It measured at least fifty yards along the side, and already contained several thousand birds of all sizes and plumage, and among them half a dozen of those enormous vultures, a yard and a half from wing-tip to wing-tip, which abound in South Africa. When the Neapolitan fell into their midst, the birds were naturally alarmed.

Pantalacci was stunned for a moment by his fall. Then he tried to rise. But his feet, legs, and hands were entangled in the meshes of the net, and he could not at first disengage them.

He had not much time to lose. He gave such terrible kicks and wrenches that he tore up the net from the pegs that fixed it to the ground. At the same time the birds, big and little, endeavored to escape.

But the more the Italian struggled, the more he was wrapped in the meshes. And a crowning humiliation was in store for him. One of the giraffes came up—the one that bore the Chinaman. Li jumped to the ground, and thinking that the best way to secure the prisoner was to roll him in the net, kicked it off the pegs in front of him, and began to throw it over.

But a most extraordinary thing happened. There came a tremendous gust of wind, bending down the trees as if a water-spout were sweeping over the ground. Pantalacci in his struggles had torn the net from many of the pegs, and seeing himself on the point of capture, made a desperate effort to get free. With a violent wrench the last peg was torn up, and the feathered colony that the net held down took flight with noisy tumult.

The small birds escaped, but the large ones were caught in the meshes by their talons at the same time as they spread their wings for flight, and together rose. All these aerial paddles and pectoral muscles working together, helped by the fury of the squall, formed so colossal a power that a hundredweight was but a featherweight to it.

The net, rolled and heaped and entangled on itself, became the sport of the wind, and, with Pantalacci ha[illegible]-

ing to it by his wrists and hands, rose thirty yards from the ground.

Cyprien arrived as the net rose, and beheld his enemy flying up to the clouds.

The vultures, tiring at their first effort, began to descend, describing a long parabola as they did so. In three seconds they had reached the lentisks and Indian figs to the west of the mealy-field. Then, having shaved the tops of the bushes at about a dozen feet from the ground, they rose again into the air.

Cyprien and Li looked on with horror at the sight of the unfortunate man borne upward for a hundred and fifty feet by the prodigious efforts of the vultures and the force of the breeze.

Suddenly a few meshes broke, and the Italian clutched wildly at the cords. But his hands missed their hold, and he fell in a heap to the earth.

The net, freed from his weight, shot up in the air, and was soon shaken off by the vultures.

When Cyprien reached him, his enemy was dead—killed in this horrible way.

And now there remained but one of the four rivals who had started on the Kaffir chase across the Transvaal.

CHAPTER XVIII

THE TALKING OSTRICH

AFTER this dreadful catastrophe Cyprien and Li thought only of hurrying from the spot as quickly as possible.

They skirted the north edge of the wood, and after an hour's walk reached the bed of a torrent, which was then dry. The torrent-bed formed a path through the lentisks and figs. Into it they turned.

There a fresh surprise awaited them. The torrent led into a good-sized lake, surrounded with luxuriant vegetation. Cyprien tried to follow the banks, but these were in places too steep.

To return by the road he had come would have been to give up all hope of catching Mataki; and as on the other side of the lake there were ranges of hills leading up to mountains of considerable height, the travelers set off

around the sheet of water in the hope that they would there obtain a good view over the surrounding district. The absence of any road made the operation a somewhat difficult one, owing to their having occasionally to dismount and lead the giraffes by the bridle. It took them more than three hours to advance five miles as the crow flies.

When they reached the point on the other side of the lake opposite to that they had started from, night came on; and, thoroughly tired out, they decided to camp. But with their scanty resources they could not be very comfortable.

Li busied himself with his usual zeal, and did what he could, but the result was not encouraging.

"You are very tired, Pa!" said he, sympathizingly. "Our provisions have nearly all gone! Let me go off in search of something to some village close by. I am sure to bring somebody to help you."

"Leave me, Li?" asked Cyprien.

"It is necessary that I should," said the Chinaman. "I will take one of the giraffes and strike off to the north. Tonaia's town that Lopepe spoke of cannot be far off, and I will manage it so that they will welcome you. Then we can go back to Griqualand, where you need no longer trouble yourself about the three scoundrels that have died."

Cyprien thought over the Chinaman's proposition. He saw that if the Kaffir was to be caught, it would be in this neighborhood; consequently it would not do to leave it. On the other hand, more provisions must be obtained. And so he with great regret decided to separate from Li and wait where he was for forty-eight hours. In that time the Chinaman on his giraffe would be able to secure assistance and return.

Li did not delay an instant. Thinking nothing of his own rest, and abandoning all idea of sleep, he wished Cyprien good-bye, kissed his hand, jumped on his giraffe, and disappeared in the night.

For the first time since his departure from Vandergaart Kopje Cyprien found himself alone in the desert. He felt profoundly miserable, and as he lay rolled in his blanket, gave himself over to the gloomiest thoughts. Isolated, almost without food and ammunition, what was to become

of him in this unknown country, hundreds of miles away from civilization? The chance of catching Mataki was now a very feeble one. He might be only half a mile from him, and yet be ignorant of his whereabouts. The whole expedition had been disastrous. Every hundred miles had cost the death of one of its members. One only remained—himself! Was he destined to die miserably, like the others?

Such were Cyprien's reflections as he gradually fell asleep.

The freshness of the morning and the night's rest gave a more confident tone to his thoughts when he awoke. While waiting for the Chinaman's return he resolved to ascend the mountain at the foot of which he had camped. He could from the summit command an extensive view, and might with the help of his glasses discover some trace of Mataki. But to do so he had to leave his giraffe, for no naturalist has as yet grouped that animal with the climbers.

He began by taking off the halter so ingeniously contrived by Li. One end of it he tied to the animal's leg, the other to a tree surrounded by long luscious grass; and he left sufficient length for the giraffe to feed at its ease. And if we add to the length of the rope the length of the giraffe's neck we must admit that very little rope was required to give it an ample radius of action.

Having secured his mount, Cyprien threw his gun on to one shoulder and his blanket on to the other, and, giving the giraffe a friendly pat in token of farewell, began the ascent of the mountain.

The ascent was long and difficult. The whole of the day was passed in scaling its steep slopes, turning its rocks and unclimbable peaks, and recommencing on the east or south an attempt made unsuccessfully on the north or west. When the night came, Cyprien had only got halfway up, and he had to wait till morning to continue the ascent.

Starting at daybreak, after assuring himself by means of his glasses that Li had not returned to the camp, he reached the top of the mountain about eleven o'clock. There a cruel deception awaited him. The summit was wrapped in cloud, and a thick mist hung over its lower

flanks. In vain Cyprien tried to pierce the curtain and see down into the neighboring valleys. The whole district had disappeared, covered with a mantle of shapeless vapor which hid everything beneath it.

Cyprien was obstinate, and waited, hoping the fog would clear off. He hoped in vain. As the day wore on, the clouds grew in density, and when night came, the mist turned to rain. He was on a bare plateau with not a single tree or rock to shelter him, and night coming on, with an increasing downpour of fine steady rain that gradually soaked through his blanket and his clothes, and wet him to the skin.

Matters were growing serious. To descend under such circumstances would have been foolish. Cyprien made up his mind to shiver in the rain all night, and dry himself in the morning in the sun.

The rain was most refreshing after the drought that had preceded it, and Cyprien soon persuaded himself that there was nothing very disagreeable about it after all. One of its most unpleasant consequences was that he would have to eat his dinner uncooked. To light a fire, or even a match, in such weather was out of the question, and so he had to content himself with opening a tin of meat and eating it as he found it.

In an hour or two, in a half-torpid state from the continual rain, he fell asleep on a large stone for a pillow and his dripping blanket for a bed. When he awoke, he was in a high state of fever.

Knowing that he was lost, if he remained any longer beneath the deluge—for the rain was still falling in torrents—Cyprien made an effort, rose to his feet, and, using his gun as a stick, began the descent of the mountain.

How did he reach the bottom? It would have puzzled him to say. Sometimes gliding down the greasy slope, sometimes scrambling down the slippery rocks, bruised and breathless, and weakened by the fever, he kept on his downward way, and about noon reached the camp where he had left the giraffe.

The animal had gone, impatient probably at having been left alone, and perhaps pinched with hunger, for the grass within the circle of which the halter formed the

radius had all been cropped. The giraffe had bitten through the rope, and gained its liberty.

Cyprien would have keenly felt this new piece of ill-fortune, had he been in his normal state, but extreme lassitude and weariness had almost crushed the life out of him. He could only throw himself on his waterproof bag, which he fortunately found untouched, change his wet clothes for dry ones, and then drop back to sleep under the shelter of the baobab beneath which he had camped.

Then began a strange period of half-slumber, of fever, of delirium, in which everything was mixed up, wherein time, space, and distance retained not a ghost of reality. Was it night or day? Sunshine or rain? Had he been there twelve hours or sixty? Was he alive or dead? He did not know. Pleasant dreams and frightful nightmares followed each other without intermission. Paris, the School of Mines, his home, Vandergaart Kopje, Miss Watkins, Pantalacci, Hilton, Friedel, legions of elephants, Mataki, and flights of birds spread over a boundless sky, all his remembrances, sensations, sympathies, and antipathies jostled each other in his wandering brain as if in a straggling battle of incoherences. To the creations of the fever were added the impressions of what was going on around him. And what made things all the more horrible was that in the thick of a storm of jackals barking, tiger-cats molrowing, hyenas laughing, he painfully pursued the romance of his delirium, and thought that he heard the crack of a rifle, followed by a deep silence. Then the concert began again, and lasted till morning.

During this delirium Cyprien would probably have passed from the fever into everlasting rest, if the strangest, most extravagant event had not happened to bring him back to reason.

The morning came. It rained no longer; the sun was high on the horizon. Cyprien had just opened his eyes. He looked, not without curiosity, at an ostrich of large stature that, after approaching him, stood still a yard or two off.

"Is that Mataki's ostrich?" asked he to himself, still pursuing his main line of thought.

It was the bird itself that spoke, and that in excellent

English, "There's no mistake! Cyprien! My poor fellow, whatever are you doing here?"

An ostrich that spoke English, an ostrich that knew his name, was certainly enough to astonish any man even in his sober senses. But Cyprien was not in the least astonished, and took the remarkable phenomenon as a matter of course. He had seen so many strange phenomena during the night, it seemed quite a natural consequence of his mental derangement.

"You are not very polite, Mrs. Ostrich," he answered. "What business is it of yours?"

He spoke in that dry, jerky way peculiar to those suffering from fever, and which left no doubt as to the state he was in. The ostrich seemed greatly troubled.

"Cyprien, my friend, you are ill, and all alone in the desert!" exclaimed the bird as it knelt by his side.

This was a physiological phenomenon no less abnormal among struthious birds than that of the gift of speech, for kneeling is a movement generally denied to them by nature. But Cyprien in his fever persisted in showing no astonishment. It seemed just as natural when the ostrich felt under its left wing, and took out a leather flask, and gave him a mouthful of the contents.

The only thing that began to surprise him was when the strange animal rose and threw off what seemed to be his plumage, and took off his neck and head, and then changed into a tall, sturdy, active man, and no other than that mighty hunter, Pharamond Barthes!

"Yes, it's nobody else!" exclaimed Barthes. "Did you not recognize my voice? You are astonished at my outfit? It is a dodge I learned from the Kaffirs to get nearer the real ostriches and reach them with their assegais! But let us talk about yourself my poor fellow. How came you here, sick and abandoned? It was the merest chance I saw you as I went by. I did not even know you were in these parts."

Cyprien was hardly in a state to talk to his friend, and could only make a few signs. Barthes saw that what was wanted, was to get the sick man the help he needed, and to attack the fever as soon as possible.

His experience in the desert had been a long one, and the bold hunter had learned from the Kaffirs a method of

treatment of great efficacy in marsh fever such as his companion was suffering from. He dug in the ground a sort of ditch, which he filled with wood, having arranged it so that there was a good draft through it. When the wood had been lighted and consumed, it converted the ditch into a veritable oven. Barthes laid Cyprien in the ditch, after carefully wrapping him up so as to leave only his head exposed to the air. Ten minutes had hardly elapsed before an abundant perspiration showed itself—a perspiration which the amateur doctor took care to foster with the help of five or six cups of an infusion he made with some herbs he had gathered; and then Cyprien dropped off into a refreshing sleep.

At sundown, when he awoke, he was sufficiently recovered to ask for something to eat. His ingenious friend was quite prepared for him, and immediately offered him some excellent soup which he had made out of the spoils of his rifle and different sorts of vegetables. A wing of roast bustard and a cup of cold water with just a suspicion of cordial completed the meal, which greatly strengthened Cyprien, and began to clear his brain of the fumes which clouded it.

About an hour afterward, Barthes having treated himself to some dinner, sat down by the engineer and told him how he came to be there so strangely disguised.

"You know what I am capable of in search of any novelty in sport. During the last six months I had killed so many elephants, zebras, giraffes, lions, and all sorts of big game and little game, fur and feather—without counting a cannibal eagle that is the pride of my collection—that a few days ago I was seized with the idea of making a change in my sporting proceedings. Up to then I had only traveled escorted by my Basutos—thirty resolute fellows whom I pay at the rate of a bag of glass beads a month, and who would throw themselves into the fire to please their lord and master. But I was very hospitably received by Tonaia, the great chief of this country, and with a view of obtaining the right of shooting, over his territory—a right of which he is as jealous as a Highland laird—I consented to lend my Basutos with four guns for an expedition that he was thinking of against one of his neighbors. The reinforcement rendered him simply in-

vincible, and he gained a signal triumph over his enemy. Hence a close friendship sealed in blood—that is to say, we mutually sucked a pin-prick in our forearms, and for the future Tonaia and I are brothers for life—and death! Assured of being let alone wherever I might wander throughout his possessions, I started off the day before yesterday in chase of tiger-cats and ostriches. As far as tiger-cats are concerned, I had the pleasure of shooting one last night, and I am rather surprised that you did not hear the row which preceded the shot. The fellow had been attracted by the odor of raw flesh, and two or three hundred jackals and hyenas had been favored with the same idea. You can imagine the concert that took place!"

"I think I heard it," said Cyprien. "I even fancied it was given in my honor."

"Not at all," said Barthes. "It was in honor of a buffalo's carcass at the bottom of the valley opening to your right. When day dawned, nothing was left of it but the bones. I will show you; it is a very creditable piece of anatomizing. You shall also see my prey, the biggest I have brought down since I landed in Africa."

"But why the strange disguise you wore this morning?" asked Cyprien.

"It is an ostrich dress. As I told you, the Kaffirs often use it to approach the birds, for they are very shy and difficult to get within range. You will say that I have my capital rifle. So I have, but what of that? The fancy struck me to go out in the Kaffir style, and to that I owe my finding you, don't I?"

"And just in time. Without you I shouldn't have troubled the world much longer," answered Cyprien, as he cordially clasped his friend's hand.

He was now out of his ditch, and comfortably lying on a bed of leaves that his companion had arranged at the foot of the baobab. The gallant fellow's kindness did not stop at that. He went down into the neighboring valley in search of his tent, which he always took with him on such expeditions, and a quarter of an hour afterward he had pitched it above the invalid.

"And now, Cyprien," said he, "let us have your history, if you are not too tired to tell it."

Cyprien felt himself well enough to satisfy Barthes'

very natural curiosity. Very shortly he told him of what had occurred in Griqualand, why he had come in pursuit of Mataki and his diamond, and what had been the chief incidents of the expedition. He told him of the deaths of Friedel, Hilton, and Pantalacci; the disappearance of Bardik; and how he was waiting for Li to return to the camp.

Barthes listened with profound attention. When asked if he had come across a young Kaffir whose appearance tallied with that given by Cyprien, he replied in the negative.

"But," added he, "I found a horse that had been turned adrift, and which may be yours." And he explained how the horse had fallen into his hands. "Two days ago," he said, "I was out hunting with three young Basutos in the mountains to the south, when I suddenly saw a gray horse dash out of one of the ravines. He had no harness, only a halter and a rope trailing behind him. He seemed very undecided which way to go, and I called out to him and showed him a handful of sugar, and he came with me. I took him prisoner. He is an excellent brute, full of courage and fire, and 'salted like a ham.'"

"He is mine! That is Templar!" exclaimed Cyprien.

"Well, Templar is yours, then," answered Barthes, "and I am glad to return him to you. Now, good-night; go to sleep, and at daybreak tomorrow we clear off from here."

Then, adding practice to precept, Barthes rolled himself in his blanket, and went to sleep by the side of Cyprien.

In the morning the Chinaman returned with provisions, and before Cyprien awoke, Barthes explained matters to Li, and left him in charge, while he went off to fetch the horse.

CHAPTER XIX

THE WONDERFUL GROTTO

It was indeed Templar that Cyprien saw before him when he awoke. The interview was most affectionate. The horse seemed to be as much pleased as his master at again meeting his traveling companion.

After breakfast Cyprien felt well enough to mount and

set out. Barthes put all the baggage on Templar and then took him by the bridle and led the way to Tonaia's capital.

As they went along, Cyprien told his friend more in detail of the principal events of the expedition since leaving Griqualand. When he came to the final disappearance of Mataki, whose description he gave, Barthes burst out laughing.

"Oh!" said he; "that is news! I can tell you something about the thief, if not about the diamond!"

"What do you know?" asked Cyprien, much surprised.

"This," replied Barthes, "that hardly twenty-four hours ago my Basutos took prisoner a young Kaffir, whom they found wandering about the country, and handed him over, bound hand and foot, to my friend Tonaia. I fancy he would have made it hot for him, for he doesn't like spies, and the stranger evidently belonged to a tribe at war with his. But his life was saved! Fortunately they found out that he knew a little hanky-panky business, and was something of a medicine man—"

"That must be Mataki," said Cyprien.

"Well, he got off easily," said Barthes. "Tonaia has invented all sorts of punishments for his enemies; but you need not be the least alarmed for your old servant. His reputation as a wizard protects him, and you will see him this afternoon in excellent health."

The news could not be otherwise than grateful to Cyprien. He would, after all, attain his object, having no doubt that if Mataki had the diamond in his possession, he would hand it over.

The two friends continued in conversation as they crossed the plain which Cyprien had galloped over on giraffe-back a few days before.

In the evening Tonaia's capital appeared in sight, lying like a huge amphitheater on the side of a hill which formed the northern horizon. It was a regular town, of from ten to fifteen thousand inhabitants, with well-marked roads and good-sized huts, some of them almost elegant in shape, bearing outward signs of ease and affluence. The king's palace, surrounded by high palisades, and guarded by black warriors armed with assegais, occupied almost a quarter of the city.

Barthes had only to show himself for the barriers to

fall before him, and he and Cyprien were immediately conducted across a series of large courts to the hall of ceremony, where the "invincible conqueror" sat in state, surrounded by his officers and guards.

Tonaia was about forty years of age. He was tall and well built. A sort of diadem of boars' teeth was on his head, and he wore a red, sleeveless tunic, and an apron of the same color richly embroidered with beads. On his arms and legs were numerous copper bracelets. His face showed intelligence and refinement, but he had a crafty, hard-hearted look.

He accorded a grand reception to Barthes, whom he had not seen for some days, and in it Cyprien shared, as the friend of his faithful ally.

"The friends of our friends are our friends," said the chief.

And learning that his new guest was not very well, Tonaia bestirred himself to install him in one of the best rooms in the palace, and to provide him with an excellent supper.

Acting on the advice of Barthes, all mention of Mataki was deferred till the morrow, when Cyprien had sufficiently recovered to appear before the king.

The whole court was assembled in the great saloon of the palace. Tonaia and his two guests were in the center of the circle. Barthes opened the negotiations in the language of the country, which he spoke fluently.

"My Basutos," he said, "have recently brought to you a young Kaffir. The young Kaffir turns out to be the servant of my comrade, the learned philosopher, Victor Cyprien, who trusts to your generosity to surrender him. And I, as he is my friend and your friend, ask you this favor."

As soon as Barthes began his speech Tonaia assumed an appropriate diplomatic air.

"The great white philosopher is welcome!" he answered. "But what ransom does he offer for my prisoner?"

"An excellent gun, ten times ten cartridges, and a bag of beads," answered Barthes.

A flattering murmur ran around the audience in recognition of the splendor of the offer. Tonaia alone did not appear dazzled at it.

"Tonaia is a great prince," he said, rising on his throne, "and the gods watch over him! A month ago they sent Pharamond Barthes with his brave warriors and wonderful guns to help us conquer our foes! That is why, if Pharamond Barthes desires it, the servant shall be given over safe and sound to his master."

"And where is he at this moment?" asked the hunter.

"In the sacred grotto, where he is guarded night and day," answered Tonaia, with all the importance of one of the most powerful of the Kaffir chiefs.

Barthes translated the reply to Cyprien, and asked the king's permission to go with his companion and seek the prisoner in the grotto.

As he said so, there was a murmur of disapproval among the assembly. The demand of the Europeans seemed unreasonable. Never under any pretext had a stranger been admitted within the mysterious grotto. A cherished tradition declared that the day the white men learned the secret, the empire of Tonaia would crumble to dust.

But the king was not particularly pleased at his decisions being prejudged in this way, and the murmur induced him, from mere caprice, to grant what, without it, he would probably have refused.

"Tonaia is the blood-brother of Pharamond Barthes, and there is nothing he need hide from him! Can you and your friend keep an oath?"

Barthes nodded affirmatively.

"Then," said the Kaffir king, "swear to touch nothing that you see in the grotto! Swear to live ever afterward when you come out as though you had never known its existence! Swear to never seek to enter it again, nor even to attempt to do so! Swear that you will tell no one what you will see!"

Barthes and Cyprien raised their hands, and repeated word for word the formula of the oath that had been delivered to them; and then Tonaia gave a few orders in a low tone, the court rose, and the guards formed into two lines. Slaves brought in a few pieces of fine linen, with which the eyes of the strangers were bandaged. Then the king sat down between them in a large palanquin

of straw, which several Kaffirs lifted to their shoulders, and then the procession moved off.

The journey was quite long enough; it took nearly two hours. From the motions of the palanquin the friends made out that they were being carried over hilly ground.

Then the coolness of the air and the echo of the steps of the escort resounding from walls quite close together indicated that they were journeying underground. Then the puffs of resinous smoke which floated into their faces told them that torches had been lighted to show the way.

A quarter of an hour afterward the palanquin was unshouldered. Tonaia made his guests step out, and ordered their bandages to be removed.

Dazzled with the light after so long a darkness, Barthes and Cyprien thought at first they were the prey of some ecstatic illusion, so splendid and unexpected was the sight that greeted their eyes.

They were in the center of an immense grotto. The ground was covered with fine sand bespangled with gold. The vault was as high as that of a Gothic cathedral, and stretched away out of sight into the distant darkness. The walls were covered with stalactites of varied hue and wondrous richness, and from them the light of the torches was reflected, flashing back with all the colors of the rainbow, with the glow of a furnace fire and the wealth of the aurora.

Colors of the most dazzling, shapes the most extraordinary, dimensions the most unexpected, distinguished these innumerable crystals. They were not, as in most grottoes, pendants, monotonously similar to each other, but nature had given free scope to fancy, and seemed to have exhausted every combination of tint and effect to which the marvelous brilliancy of the rocks could lend itself.

Blocks of amethyst, walls of sardonyx, masses of rubies, needles of emeralds, colonnades of sapphires deep and slender as forest pines, bergs of aquamarine, whorls of turquoise, mirrors of opal, masses of rose gypsum, and gold-veined lapis lazuli—all that the crystal kingdom could offer that was precious and rare and bright and dazzling had served as the materials for this astonishing specimen of architecture; and, further, every form, even of the

vegetable kingdom, seemed to have been laid under contribution in the wondrous work. Carpets of mineral mosses soft and velvety as the finest gauze, crystalline trees loaded with flowers and fruits of jewels recalling the fairy gardens of Japanese art, lakes of diamonds, palaces of chalcedony, turrets and minarets of beryl and topaz, rose pile upon pile, and heaped together so many splendors that the eye refused to grasp them. The decomposition of the luminous rays by the thousands of prisms, the showers of brilliancy that flashed and flowed from every side, produced the most astonishing combination of light and color that had ever dazzled the eyes of man.

Cyprien doubted no longer. He beheld himself transported to one of those mysterious receptacles whose existence he had long suspected, in which nature stored and crystallized wholesale those precious gems which she only gives to man in favored spots and in fragmentary and isolated specimens. For a moment he was tempted to doubt the reality of his vision, but as he passed a huge heap of crystal he tried to scratch it with the ring on his finger, and found the attempt was in vain. The immense crypt was built up of genuine diamonds, rubies, and sapphires, and in masses so prodigious that their value was beyond all calculation.

Only astronomical numbers could be called in to give an approximate amount. In fact, there, buried in the earth, unknown and unproductive, lay a mass of wealth that could be reckoned in trillions and quadrillions.

Was Tonaia acquainted with the enormous wealth he here possessed? Probably not. Even Barthes who knew little about such matters, did not suspect for a moment that the marvelous crystals were precious stones. Most likely the Kaffir king thought himself simply the master and guardian of a particularly curious grotto, whose secret an oracle or some traditional superstition forbade him to reveal.

One thing seemed to confirm this opinion. In several corners of the cave Cyprien noticed heaps of human bones. Was this, then, the burial-place of the tribe, or—what was more horrible and more probable—did they here shed human blood in the rites of sacrifice or the practice of cannibalism?

Barthes was of the latter opinion and whispered to Cyprien, "Tonaia told me that since his accession nothing of this sort had occurred, but the sight of those bones rather shakes my confidence in him;" and he pointed to a huge heap that had been recently formed, and which bore obvious marks of having been cooked.

The impression was confirmed a few minutes later.

The king and his guests reached the end of the grotto, before an opening which ran back into a recess similar to one of the lateral chapels in a basilica. Behind the iron grating which shut it in there was a wooden cage; in the cage was a prisoner. The cage was just large enough to allow him to crouch, while—the fact was too obvious—he was fattened up for an approaching feast!

The prisoner was Mataki.

"You! you! pa!" exclaimed the unfortunate Kaffir as soon as he recognized Cyprien. "Take me with you! Deliver me! I would rather go back to Griqualand and be hanged than remain in this poultry-coop for the horrible punishment Tonaia intends before he eats me!"

This was said in such a pitiful voice that Cyprien was quite moved by it.

"Be it so, Mataki," he said; "I can obtain your liberty, but you cannot come out of that cage until you have given up the diamond—"

"The diamond, pa!" interrupted the Kaffir—"the diamond! I have no diamond! I never had it! I swear it! I swear it!"

He said this in such a tone of truth that Cyprien had no doubt of his veracity. Besides, he had always doubted that Mataki was the thief.

"But then, if you did not take the diamond," he asked, "why did you run away?"

"Why? Because when my comrades were tried with the wands, they said that I must be the thief, and that I had acted as I did to disarm their suspicion. When in Griqualand you accuse a Kaffir, you know it is not long before he is sentenced and hanged; and, for fear that they should catch me, I ran away, as if I had been guilty."

"He is speaking the truth, I think," said Barthes.

"So do I," said Cyprien; "and perhaps he was not far wrong in getting out of the way of Griqualand justice."

Then he turned to Mataki. "Well, I do not doubt your innocence, but at Vandergaart Kopje they will not believe you when you tell your story. Are you willing to take your chance, and go back?"

"Yes; I will risk everything rather than remain here!" said Mataki, who seemed a prey to the keenest terror.

"We will see about it," answered Cyprien—"my friend will do so at once."

Barthes stepped up to the king. "Speak out," he said. "What do you want for the prisoner?"

Tonaia reflected for a moment, and then said, "Four guns, ten times ten cartridges, and four bags of beads. That is not too much, is it?"

"It is twenty times too much, but Pharamond Barthes is your friend, and he will give you what you ask;" and then he stopped for an instant, and continued, "Listen, Tonaia. You shall have the four guns, the ten times ten cartridges, and the four bags of beads; but you shall give us a team of bullocks to take us back across the Transvaal, with the necessary provisions and an escort of honor."

"That I will do," said Tonaia, in a tone of complete satisfaction.

Then he whispered confidentially into Barthes' ear, "The team is all ready. They came out of your friend's wagon when my men came across them on their way home."

The prisoner was at once handed over; and after a final glance at the splendors of the grotto, Cyprien, Barthes, and Mataki were blindfolded, and returned to Tonaia's palace, where a grand banquet was given in honor of the treaty.

It was agreed that Mataki should not appear immediately at Vandergaart Kopje, but should remain in the neighborhood and re-enter the engineer's service when he was sure it was safe to do so.

On the morrow Barthes, Cyprien, Li, and Mataki departed with a numerous escort for Griqualand. But the Star of the South seemed to be irretrievably lost, and Mr. Watkins might as well give up his idea of sending it to the Tower of London to sparkle among the crown jewels of Great Britain.

CHAPTER XX
THE RETURN

JOHN WATKINS had never been in a worse humor than since the departure of the four rivals in search of Mataki. As the days and weeks went by it seemed to him that all chance of recovering the precious diamond was rapidly vanishing. And his companions had all gone; and Friedel, Hilton, Pantalacci, even Cyprien, whom he had been accustomed to see so often, were much missed. So he betook himself to his gin, and, as may be easily imagined, the alcoholic support he administered to his grief was not much calculated to sweeten his character.

At the farm the greatest anxiety prevailed as to the fate of the expedition, for Bardik had been carried off by a party of Kaffirs, and, escaping a few days afterward, had made his way back to Griqualand with the news of the deaths of Hilton and Friedel. Alice was very unhappy; she sang no longer, and her piano remained dumb. Even her ostriches but slightly interested her. Dada no longer made her smile at his greediness, and impudently swallowed the most extraordinary things without the slightest protest.

Miss Watkins had two causes of alarm. The first was lest Cyprien should never return; the second, lest Pantalacci, the most hated of her admirers, should bring back "The Star" and claim the reward of his success. The idea of becoming the wife of the Italian was absolutely abhorrent to her. She thought of it by day, and dreamed of it by night; and her bright cheeks grew paler and paler, and her blue eyes clouded still deeper with gloom.

Three months had passed. It was evening. She was sitting near the lamp in the parlor; her father was on the other side of the table, smoking and drinking as usual. Her head was bent over her woolwork, which she had taken up in place of her neglected music, and in silent and sorrowful reverie she was thinking over her fate.

There came a gentle tap at the door.

"Come in!" she said, somewhat surprised, and wondering who it could be at such an hour.

"It is only I, Miss Watkins," said a voice which made her start—Cyprien's voice!

He had come back—thin, sunburned, with a long beard which disguised him, and clothes faded and worn by travel, but active and courteous and cheery as ever.

Alice jumped up and uttered a cry of astonishment and gladness. With one hand she strove to check the beatings of her heart; the other she held out to the engineer, and he was clasping it in his when Mr. Watkins awoke from his slumbers and asked, "What's up?"

It took the farmer two or three minutes to grasp the situation. But scarcely had the first gleam of intelligence struck him than a cry—a cry straight from the heart—escaped him—"And the diamond?"

The diamond, alas! had not come back.

Cyprien briefly told the story of the expedition. He related the death of Friedel, of Hilton, of Pantalacci, the pursuit of Mataki and his imprisonment by Tonaia—without mentioning his return to Griqualand—and explained his reasons for feeling sure of the Kaffir's innocence. He did not forget to mention the devotion of Bardik and Li, and the friendship of Barthes, and enlarged on what he owed to the gallant hunter, and how, thanks to him, he had been able to return with his two servants from a journey that had proved fatal to his companions. He said nothing of the criminal schemes of his rivals, and he did not forget his promise to keep the secret of the wonderful grotto and its mineral riches, to which those of the Griqualand diamond field were as worthless ballast.

"Tonaia," said he, in conclusion, "faithfully kept his engagements. Two days after I reached his capital, everything was ready for our return—provisions, teams, and escort. Under the command of the king in person about three hundred blacks with flour and smoked meat accompanied us to the camp where we had abandoned the wagon, which we found untouched beneath the brushwood we had heaped upon it. We then bade good-bye to our host, having given him five guns instead of the four he expected, and thus made him the most redoubtable potentate between the Limpopo and the Zambesi!"

"But how about your return journey when you left your camp?" asked Miss Watkins.

"Our return journey was slow, but devoid of accidents. Our escort left us at the Transvaal frontier, where Pharamond Barthes and his Basutos separated from us to go to Durban, and after a forty days' march across the Veld, here we are, very much as we were before we left."

"But why did Mataki run away?" asked Watkins, who had listened to the recital with much interest, without showing the slightest emotion about the three men who would never return.

"Mataki fled because he was afraid."

"Is there no justice in Griqualand?" asked the farmer.

"Yes, but justice that is often too summary, Mr. Watkins; and I hardly blame the poor fellow, when wrongfully accused, for having thought it best to disappear during the first excitement at the diamond's loss."

"Nor do I," said Alice.

"And I repeat that he is not guilty, and I think they will leave him alone for the future."

"Hum!" said Watkins, apparently unconvinced. "Don't you think Mataki shammed that fear, so as to get out of reach of the police?"

"No! He is innocent! I am sure of it," said Cyprien rather dryly, "and I think that I have bought the assurance rather dear."

"Oh! you are welcome to your opinion, and I am welcome to mine."

Alice saw that the discussion was likely to end in a dispute, and so struck in by way of diversion with, "Do you know, Mr. Cyprien, that during your absence your claim has turned out a splendid one, and that your partner, Mr. Steel, is on the road to become one of the richest diggers in the Kopje?"

"No, I did not," answered Cyprien frankly. "My first visit I paid to you, Miss Watkins, and I know nothing of what has happened during my absence."

"Perhaps you have not had any dinner?" asked Alice, with the instinct of the thorough little housewife that she was.

"I am sorry to say I have not," said Cyprien, blushing, though why he blushed, he did not know.

"Oh! But you must not go without food. An invalid like you—after such a trying journey. Why, it is nearly eleven o'clock!"

And without heeding his protestations she ran to the kitchen, and reappeared with a tray covered with a spotless cloth, and bearing some cold viands and a beautiful peach tart that she herself had made.

The tray was deposited in front of Cyprien, who seemed much confused, and as he hesitated to use the knife on a superb "biltong"—

"Shall I cut it for you?" asked Miss Watkins, with one of her sweetest smiles.

And the farmer, suddenly getting hungry at the sight of the gastronomic display, asked for another plate and a slice of biltong. Alice was delighted to wait on them, and merely to keep the gentlemen company, as she said, began to eat a few almonds.

The hurriedly-prepared supper was simply delightful. Never had the young engineer experienced such a triumphant appetite. He had three helpings of peach tart, and quite won the heart of Mr. Watkins, who, however, soon dropped off to sleep.

"And what have you been doing during the last three months?" asked Cyprien. "I am afraid you have forgotten all your chemistry."

"No, sir; you are wrong. I have been working very hard, and I have been trying some experiments in your laboratory. Oh! I didn't break anything! You needn't look so frightened. I am very fond of chemistry, and cannot understand how you could leave such a splendid science to become a digger or a bushman."

"But you know why I gave up chemistry."

"I know nothing," said Alice, with a blush, "and I think you were wrong. Were I in your place, I should try and make another diamond. That is much better than looking for one underground!"

"Is that an order, then?" asked Cyprien, with his voice all of a tremble.

"Oh, no!" answered Alice, with a smile, "only a request. Oh, Mr. Cyprien," she continued more seriously, "if you only knew how unhappy I have been in knowing that you were exposed to all the fatigues and dangers you

have been through. You have not told me all, but I can guess. A man like you, so learned, so well prepared to do good work and make great discoveries, ought not to have been exposed to perish in the desert from the bite of a snake or the grip of a lion without any gain to science or humanity. It was so wrong to let you go; and it was only by a miracle that you escaped to come back. Without your friend Mr. Barthes—"

She did not finish, but the tears welling up into her eyes completed the thought for her.

"Those tears," said Cyprien, "are more precious to me than all the diamonds in the world, and make me forget all my troubles."

There was a short silence, which Alice broke with her usual tact, by resuming her account of her chemical studies.

It was past midnight when Cyprien returned to his hut, where a packet of letters awaited him, carefully arranged on his work-table by Miss Watkins.

These letters, reaching him after so long an absence, he hardly dared open. If they brought him news of some misfortune! His father, his mother, his little sister Jane! So many things can happen in three months!

He rapidly glanced through them, and found they contained nothing but good news. All his people were well. There were the warmest congratulations on his excellent theory of diamond formation. He could stay another six months in Griqualand, if he thought his doing so would be in the interests of science. Everything was for the best, and Cyprien went to sleep with a lighter heart than he had had for many a day.

In the morning he visited his friends, and stayed some time with Thomas Steel, who had been working to considerable purpose. The hearty Lancashire lad received his partner with the greatest cordiality. Cyprien arranged with him for Bardik and Li to resume work as before, intending, if they were successful, to give them a share in the claim.

On his part, he had given up all thoughts of again trying his hand at digging, and, in accordance with Alice's wish, resolved to resume his chemical researches.

His conversation with her had confirmed him in his own

ideas. He had for some time thought that his true course was to abandon the rougher work, and leave travel and adventure alone. Too loyal and faithful to his word to think for an instant of abusing the confidence of Tonaia, and profiting by his knowledge of the cavern with its marvelous minerals, he found in it a valuable confirmation of his theory of gems, which could not but increase his ardor in research. And so he returned to his laboratory and resumed his investigations.

And he had a strong incentive to do so, for since the artificial diamond had been lost, Mr. Watkins said no more about his daughter's marriage. If the engineer could make another gem of extraordinary value, the farmer might again be induced to entertain the subject.

And so Cyprien resolved to set to work without delay, and made no attempt to conceal his proceedings from the diggers of Vandergaart Kopje. It would have been well, perhaps, had he done so.

He obtained a new tube of great resisting power, and filled it in the same way.

"What I want," said he to Alice, "to crystallize the carbon—that is to say, make the diamond—is a proper solvent, which by evaporation or cooling will give the crystallization. We have a solvent for aluminium in sulphide of carbon, and by analogy we must find something similar for carbon, such as boron or silicon."

Although Cyprien was not in possession of this solvent, he went on with his work. Instead of Mataki, who prudently kept away from the camp, Bardik was employed in keeping in the fire night and day, a task he fulfilled as zealously as his predecessor.

In the meantime, foreseeing that after this prolongation of his stay in Griqualand he would have to leave for Europe, Cyprien started on another item in his program, which he had hitherto left untouched. This was the determination of the exact position of a certain depression in the north-east of the plain, which seemed to have been the spot where the waters debouched at the time the diamantiferous deposit was formed.

Five or six days after his return from the Transvaal he was working at this with all his usual precision. For an hour or more he had been placing his poles, and noting

his bench-marks on a fully-detailed map he had procured at Kimberley, and, strange to relate, in every case he found that nowhere did his figures agree with the plan! At last, after repeated trials, there was no resisting the evidence that the map was out of truth as regards its compass bearings, and that the latitudes and longitudes were erroneous.

He was using an excellent chronometer, that had been duly rated, and which he had specially brought out with him for the purpose of determining the longitude, and the time was high noon. Hence, feeling assured of the infallibility of his compass and his declination needle, he had no hesitation in deciding that the map on which he was marking his observations was entirely untrustworthy, owing to some serious oversight.

In fact, the north of the map, as shown by the arrow was really the north-north-west, and all the positions had necessarily to be altered.

"I see what it is," Cyprien suddenly exclaimed, "the asses who did this forgot to allow for the variation, and that is nearly twenty-nine degrees west! All their latitude and longitude lines ought to be swung around twenty-nine degrees! They must have funny surveyors that produced this masterpiece."

And he chuckled loudly at the blunder.

"Well, to err is human. Let him throw the first stone at these fellows who never made a mistake in his life."

Cyprien had no reason for keeping secret the rectification he had made in the orientation of the diamantiferous beds of the district. As he was returning to the farm, he met Vandergaart, and casually mentioned it to him.

"It is very curious that such a huge mistake was not found out before. It affects all the maps of the district."

The old lapidary pricked up his ears and looked Cyprien straight in the face.

"Are you sure you are right?" he asked.

"Oh, yes!"

"And will you swear it in a court of justice?"

"In a dozen courts, if you like."

"And no one can deny what you say?"

"Certainly not; I should only have to point out the

mistake. It is open, gross, palpable. They have omitted the magnetic variation, that is all."

Vandergaart shook hands and walked off without another word, and Cyprien soon forgot the strange way in which the intelligence had affected him.

But two or three days afterward, when he went to call on the old lapidary, he found the door shut. On it was a notice, "AWAY ON BUSINESS."

CHAPTER XXI

VENETIAN JUSTICE

DURING the following days Cyprien was busy attending to his experiment. He had introduced several changes in the construction of his furnace and contrived a better draft. By doing so he hoped to make his second diamond in much less time than he had done the first.

Miss Watkins took great interest in the attempt which she had really originated. Frequently was she seen at the furnace, watching through the grating the fire that roared within.

John Watkins was no less interested than his daughter, but from other motives. He wished to become once more the owner of a gem whose value could be reckoned in millions. Great was his fear that the experiment would not succeed a second time, and that chance would fail to play the important part in it that it had done on the previous occasion.

But if the farmer and Miss Watkins encouraged the experimenter to persevere, it was not so with the diggers. Their opinions were the same as those of Pantalacci, Hilton, and Friedel; and the Jew Nathan never ceased in his scheming to excite them against the young engineer. If this manufacture of diamonds was to become a trade—if, like white sapphires, amethysts, topazes, and emeralds made from crystals of alumina colored by metallic acids, diamonds were to be turned out from the laboratory without trouble—the market value of the stones would tend to diminish. If making diamonds was to become a recognized handicraft, the diamond-fields at the Cape and elsewhere would be ruined.

All this had been said after the first experiment, and now it was repeated with more violence and acrimony. The diggers wished little good to Cyprien or his works. But he thought little of the diggers, and went on his way, determined to see his experiment through. He was not going to hang back before public opinion, and had no intention of keeping a secret that might do good to all.

But if he continued his work without fear or hesitation, Miss Watkins, who heard what was going on, began to tremble for him. She reproached herself with having led him on to the track. To trust to the police protecting him was to trust to a broken reed. A murderous stroke is quickly dealt, and may fall before any one can intervene. Cyprien might have to atone with his life for the supposed injury he had done to the diggers of South Africa.

Alice grew anxious, and could not hide her anxiety from the engineer. He reassured her as well as he could, and thanked her for the motive that had prompted her to speak. In the interest she took in him he saw the proof of a tender sentiment, whose existence was now no secret between them. Cyprien was only too pleased that his experiment led to closer intimacy with Alice, and bravely continued his work.

"What I am doing is for us both," he said to her. But Miss Watkins, noticing what people were saying down at the claims, lived a life of terror.

And not without reason. A regular agitation was organized against Cyprien, and the diggers did not confine themselves to threats and recriminations, but proceeded to do damage.

One evening, when Cyprien went off to look at the furnace, he found it had been broken down. During Bardik's absence a lot of men had taken advantage of the darkness and in a couple of minutes destroyed what had been the work of days. The bricks had been thrown about, the furnaces had been smashed, the fires put out, and the tools scattered and rendered useless. Nothing was left of what had cost so much thought and trouble. All had to be begun over again, if he was the man not to give in to mere brute strength, or he would have to abandon the game.

"No!" he exclaimed. "No, I will not give in! And

tomorrow I will give information against the scoundrels who have destroyed my property. We shall see if there is justice in Griqualand."

There was justice, but not the sort Cyprien imagined.

Without saying a word to anybody, without even telling Miss Watkins, for fear of adding to her alarm, Cyprien regained his hut, and lay down to sleep, resolved to begin legal proceedings in the morning, even if he had to go eventually to the Governor of the Cape.

He had slept perhaps two hours, when the noise of his door opening awoke him with a start.

Five men in crape masks, armed with revolvers and rifles and carrying bull's-eye lanterns, took up their position around the bed.

Cyprien had no idea that anything serious was intended. In fact, he would have laughed, had not the pleasantry seemed to him unworthy of such a compliment.

But a heavy hand struck him hard on the shoulder, and one of the masked men opened a paper he held, and in a gruff voice read as follows:—

"Victor Cyprien—

"This is to give you notice that the secret tribunal of Vandergaart Kopje, twenty-two members being present, acting in the name of the public safety, have this day, at twenty-five minutes past midnight, sentenced you to death. You have by a treacherous discovery threatened their interests, their lives, and the lives of their families, and of all men who earn their livelihood by the cutting and sale of diamonds. The tribunal in their wisdom have decided that such a discovery deserves annihilation, and that the death of one man is preferable to that of many thousands of his fellows. It has decreed that you shall now have ten minutes to prepare for death, and that you shall choose the manner in which you will die; that your papers shall be burned, with the exception of an open letter you can address to your relatives; and that your hut shall be razed to the ground.

"And thus be it with all traitors!"

As he heard this death warrant, Cyprien's confidence began to quail, and he wondered if this curious comedy was one of the savage customs of the country or was really in earnest.

The man who held him by the shoulders soon cleared away his doubts.

"Get up at once," he said gruffly; "we have no time to lose."

"It is a murder!" replied Cyprien, as he rose and began to dress by his bedside.

He was more disgusted than frightened, and concentrated his thoughts on what had happened to him with the coolness with which he would have attacked a mathematical problem. Who were these men? He could not discover even by the sound of their voices. Evidently those among them who knew him personally were advisedly silent.

"Have you chosen what death you will die?" asked the masked man.

"I have no choice to make, and I protest against the odious crime of which you wish to be guilty," said Cyprien in a firm voice.

"You can protest, but you will none the less be hanged. Don't you want to write anything?"

"Nothing I would care to trust to assassins like you!"

"Forward, then!" said the chief.

Two men placed themselves on each side of the engineer, and the procession was formed to pass through the doorway.

But as the advance began, something very unexpected happened. Into the middle of the secret commissioners of Vandergaart Kopje a man rushed with a bound.

It was Mataki.

The young Kaffir, who often prowled around the camp after dark, had noticed the masked men, and followed them. He had heard all that passed, had understood the danger that threatened his master, and suddenly leaped in, scattered the diggers right and left, and threw himself at Cyprien's feet.

"Why do these men want to kill you, pa?" asked he, clasping his master's legs, while the masked men in vain endeavored to tear him away.

"Because I made an artificial diamond," answered Cyprien, clasping Mataki's hands to prevent his being torn away from him.

"Oh, pa! I am so sorry for the harm I have done!" said the Kaffir, bursting into tears.

"What?" asked Cyprien.

"Yes, I will confess everything now they want to kill you!" said Mataki. "Yes, they ought to kill me, not you, for I put the big diamond in the cannon!"

"Take this fellow away!" said the leader of the gang.

"I put it—I put the diamond in the tube!" said Mataki, struggling. "Yes, I swindled you, pa! I thought you would like to think that your experiment had come off!"

His protestations were so fierce in their energy that the masked men stopped to listen to them.

"Is that true?" asked Cyprien, surprised and disappointed at what he heard.

"Yes! a hundred times yes! I speak the truth!"

And then the men released him, and he sat on the ground and spoke as follows—

"The day of the landslip, when I was buried by the fall, I found the big diamond! I was holding it in my hand and wondering how I was to hide it, when the wall fell on me, to punish me for my wicked thought. When I came back to life, I found the stone in the bed you had put me in. I was going to give it you, but I was ashamed to confess that I was a thief, and I waited for a favorable opportunity. Not long afterward pa wanted to make a diamond, and set me to look after the fire. The second day, while I was there alone, the gun burst, and the furnace was all broken. Then I thought that pa would be sorry because his experiment had failed; and I squeezed a handful of clay around the big diamond and slipped it into the cracked gun; and I made the furnace all right again, so that pa could not see it had broken. I waited and said nothing, and when pa found the diamond, he was very glad."

A burst of laughter that the five men could not restrain saluted these last words of Mataki.

Cyprien did not laugh; he bit his lips in vexation.

It was impossible to mistake the Kaffir's story; it was obviously too true. In vain Cyprien sought for some reason for his telling a falsehood. In vain he said to himself, "A diamond exposed to such a temperature would have been volatilized!"

His sound sense showed him at once that, protected in its envelope of clay, the gem had escaped the heat, or been only partially affected by it. Perhaps, even, it was the torrefaction that had given it its sable tint. Perhaps it had been volatilized and recrystallized in its shell!

These thoughts crowded into his brain and associated themselves with extraordinary rapidity. He was stupefied.

"I remember seeing the piece of earth in the Kaffir's hand on the day of the landslip," said one of the men, when the laughter had somewhat subsided; "and he clutched it so tight in his fingers that we couldn't get it out."

"There is no doubt now," said another. "Is it possible to make a diamond? We must have been mad to think so! As well try to make a star!"

And they began to laugh again.

Assuredly Cyprien suffered more from their mirth than their menaces.

After consulting together in a whisper, the leader said to him, "We are of opinion that the execution of the sentence passed on you, Victor Cyprien, may be respited. You are free! but remember that the sentence always hangs on you! One word—one sign, even—to the police, and you shall die! Your very good health!" and, followed by his companions, he disappeared through the doorway.

The room was left in darkness. Cyprien might have imagined he had been the prey of a nightmare. But the sobs of Mataki, who lay stretched on the ground, and wept noisily with his head between his hands, proclaimed the reality of what he had passed through.

It was cruelly true! He had escaped from death, but at the cost of a deep humiliation. He, a mining engineer, a pupil of the Polytechnique, a distinguished chemist, and well-known geologist, had been taken in by a miserable Kaffir! Or rather, it was his own vanity, his ridiculous presumption, that had led him to this unheard-of blunder. He had even thought out a theory accounting for his discovery! What could be more ridiculous?

"My paper!" he exclaimed. "Have the brutes taken it away with them?"

He lighted a candle. No! His memoir was there. No

one had seen it. He could not rest until he had burned it.

Mataki's grief was so intense that he endeavored to comfort him. This was not very difficult. At the first kind words of his "pa" he seemed to live again. And Cyprien assured him of his forgiveness on condition that he left off such tricks for ever.

Mataki promised by all that was sacred that he would do so, and Cyprien went to bed.

In the morning, when it became known that the Star of the South was neither more nor less than a natural diamond, that the diamond had been found by the young Kaffir, who was quite conversant with its value, all the suspicion against him was again awakened. Watkins made a tremendous noise. Mataki must be the thief! After having thought of stealing it once, it was evident that he had stolen it on the night of the dinner.

Cyprien protested, and offered to guarantee the Kaffir's innocence, but no one would listen to him. And this showed him how well founded had been Mataki's fear of returning to Griqualand.

But the young engineer had no idea of giving in, and so brought forward an argument which, to his mind, sufficiently cleared the Kaffir.

"I believe in his innocence," said he to John Watkins; "and, besides, if he was guilty, it is my business, and no one else's. Natural or artificial, the diamond belonged to me before I gave it to Miss Alice—"

"Oh, it belonged to you, did it?" said Watkins, with a sneer.

"Certainly," said Cyprien. "Was it not found on my claim by Mataki, who was in my service?"

"Nothing could be more correct," answered the farmer, "and consequently it belonged to me by the terms of our agreement, which gave me the three first stones which turned up."

Cyprien gazed in astonishment. It was true, and he said nothing.

"My claim is just, I believe?" asked John Watkins.

"Quite just," answered Cyprien.

"I shall be very much obliged to you, then, if you will say so in writing, in case we come across the diamond which some scoundrel has so impudently stolen."

Cyprien seized a sheet of blank paper, and wrote:

I beg to state that the diamond found on my claim by a Kaffir in my service is, under the terms of my agreement, the property of Mr. John Stapleton Watkins.

"VICTOR CYPRIEN."

And with this vanished all the dreams of our youthful engineer. If the diamond ever did appear, it belonged of right to Watkins, and a new abyss that many millions could not fill had opened between Alice and him.

And if the farmer's claim was disastrous to these two, it was none the less so to Mataki. The diamond had been stolen from John Watkins, and John Watkins was not the man to abandon the chase when he thought the thief was in his power.

And so Mataki was arrested, imprisoned, and in twelve hours had been sentenced to be hanged, in spite of all that Cyprien could say or do for him.

He would escape, if he would restore the Star of the South. But he could not restore it, for he had never taken it. And Cyprien did not know what to do to save the unfortunate man, in whose innocence he was obstinate enough still to believe.

CHAPTER XXII

A MINE OF A NEW SORT

MISS WATKINS notwithstanding Cyprien's silence, soon heard all about the visit of the masked men.

"Ah!" she said to him. "Is not your life worth more than all the diamonds in the world?"

"Dearest Alice—"

"You must not experiment in that way any more."

"You order me?"

"Yes! I order you to leave off, as I once ordered you to begin. That is, if you like to take orders from me."

"As I like always to obey them," said Cyprien, taking the hand that Alice held out to him.

But when he told her what had happened to Mataki, she was in despair, particularly when she learned that her father was the cause.

She, like Cyprien, did not believe in the poor Kaffir's guilt. She, like him, would do all she could to save him. But how to do so, and how to influence her father in his favor was more than she could discover.

Mr. Watkins had obtained no confession from Mataki. He had shown him the gallows on which he was to hang; he had promised him pardon, if he would only confess; but all to no purpose. Then, having to give up all hope of ever recovering the Star of the South, he had gone quite mad with rage. No one dare come near him.

The day after the sentence, Mr. Watkins, suffering rather less than usual from his gout, took advantage of the relief to put his papers in order. Seated in front of a large writing-table of ebony inlaid with yellow marqueterie, a relic of the old Dutch domination, stranded after many vicissitudes in this remote corner of Griqualand, he was leisurely running through his different assignments, agreements, and correspondence.

Behind him, Alice, lost in her work, was stitching away, without noticing the big ostrich, Dada, who stalked about the room with his usual gravity, sometimes giving a glance out of the window, sometimes giving a long, scrutinizing look at Mr. Watkins.

An exclamation from the farmer made Alice look up.

"That bird is a nuisance!" he said. "Look, he has swallowed a deed! Here, Dada! Tsh! Tsh! Give it up! Give it up!" And then came a torrent of abuse. "You wretched old brute! You have swallowed it! A most important thing like that! The deed of assignment that gave me the Kopje! It is abominable! I'll make you give it up—if I have to throttle you!"

And Watkins jumped off the chair and ran after the ostrich, which made two or three turns of the room, and then bounded out through the open window.

"Father!" said Alice, aghast at her favorite's greediness, "do be calm! Listen to me! You will make yourself ill!"

But Watkins did not hear her. The ostrich's escape had driven him to distraction; and, almost choking with rage, he hobbled after the bird, and roared out:

"I have had too much of it! I will settle you! I am not going to give up my title-deeds in that way! I will put a bullet through you, and we'll see!"

Alice burst into tears.

"Father! Do have mercy on the poor thing!" said she. "Is the paper so very important? Cannot you get a duplicate? Will you make me miserable and kill poor Dada for such a trifle as that?"

But John Watkins would hear nothing. He was looking around on all sides in search of the victim.

At last he caught sight of Dada standing by the side of the hut occupied by Cyprien. Bringing his gun to his shoulder he took aim, but the ostrich seemed to recognize the danger, and disappeared around the corner.

"Just wait! Wait! I'll have you, you brute!" said Watkins.

And Alice, more frightened than ever, followed him, to make yet another appeal for mercy.

They reached the hut and walked around it. No ostrich! Dada had become invisible!

He could not have left the hill, for they would have seen him. He must have gone inside the hut through the door, or through one of the windows which were open at the back.

So thought Watkins. And he hurried up and knocked at the door. Cyprien opened it.

"Mr. Watkins? Miss Watkins? I am delighted to see you. Come in," said he, looking very much surprised at the unexpected visit.

The farmer hastily explained matters. He was very much out of breath, and very much excited.

"Well, well, have a look for the culprit," said Cyprien.

"And I'll precious soon settle his hash for him!" added the farmer, brandishing his gun like a tomahawk.

At the same moment a glance from the young lady showed Cyprien the horror with which she regarded the projected execution. His mind was consequently made up immediately. He would not find the ostrich.

"Li," he whispered to the Chinaman, "I expect the ostrich is in your room. Tie it up there, and let it get away as soon as I have taken Mr. Watkins in the opposite direction."

Unfortunately this excellent plan proved a failure at the outset, for the ostrich had taken refuge in the very first room into which Mr. Watkins went. There it was, mak-

ing itself as small as possible, with its head stuck under a chair, but as visible as the sun at noonday.

Watkins rushed at it.

"Now, you brute, your time has come!"

But, angry as he was, he hesitated. To fire a gun point-blank in a house that did not belong to him was rather too strong a proceeding.

Alice turned away and wept, and saw nothing of this hesitation.

Then a brilliant idea occurred to the engineer.

"Mr. Watkins! You only want to recover your paper? Well, you need not kill Dada to do that! We can open the stomach, for the document can hardly have got out of it yet. Will you allow me to try the operation? I have worked at zoölogy at the museum, and I know quite enough to manage a little surgical affair like that."

Whether it was that the idea of vivisection flattered the vengeful instincts of the farmer, or that his anger was cooling down, or that he was touched by his daughter's tears, any way, he allowed himself to be persuaded, and accepted the compromise.

"But we must not lose the document," insisted he; "if it is not in the stomach, we must go farther down for it! I must have it at any price."

The operation was not quite so easy as it looked at first sight, notwithstanding the resigned attitude of the wretched Dada. A small ostrich has prodigious strength, and once the patient felt the amateur surgeon's knife, the gigantic Dada might turn on them in anger, and escape. And so Li and Bardik were called in to assist.

First of all the ostrich had to be secured. The lines which Li always kept in his room came in very handy. An arrangement of hitches and knots soon bound Dada beak and foot.

Cyprien did not stop there. In order to spare the sensibility of Miss Watkins, he resolved to save the ostrich all pain, and so covered its head with a handkerchief moistened with chloroform.

That done, he began the operation, not without considerable anxiety.

Alice, shuddering at these preliminaries and pale as death, had taken refuge in an adjoining room.

Cyprien began by feeling at the base of the bird's neck so as to find the gizzard. This was not very difficult, for the gizzard forms at the upper part of the thoracic region a mass of some size, hard and prominent, which the fingers could easily distinguish among the softer parts of its vicinity.

With a sharp penknife the skin of the neck was carefully cut into. It was large and loose, like that of a turkey, and covered with gray down, which was easily pressed aside. The incision caused just a little blood to flow, and this was carefully wiped off with a wet rag.

Cyprien noticed the position of the two or three important arteries, and carefully pulled them aside with the wire hooks he had given Bardik to hold. Then he opened a white, pearly tissue, which filled a large cavity above the collar-bone. He had reached the gizzard.

Imagine the gizzard of a fowl increased almost a hundred-fold in size, hardness, and weight, and you have the gizzard of the ostrich.

Dada's gizzard looked like a large, brown pocket, greatly distended with the food or the foreign bodies that the voracious animal had swallowed during the day—or in the past. And it was quite enough to see this brawny, healthy organ to understand that there was little danger in resolutely attacking it.

With the sharp hunting-knife that Li placed in his hand, Cyprien cut deeply down into the mass.

Down the fissure it was easy to introduce the hand to the very bottom of the gizzard.

The first thing Cyprien lighted on was the deed so much regretted by Mr. Watkins. It was rolled up into a ball, slightly creased perhaps, but still intact.

"There is something else," said Cyprien, who had put back his hand into the hole. And bringing it back, he found an ivory ball. "The darning-ball belonging to Miss Watkins," he exclaimed. "Only think, it is five months ago since it was swallowed! Evidently it could not pass the lower orifice."

He handed the ball to Bardik, and resumed his investigations like an archæologist amid the ruins of a Roman camp.

"A copper candlestick!" he exclaimed, extracting one

of those useful articles, crushed, flattened, oxydized, but still recognizable.

Here the laughter of Bardik and Li became so noisy that Alice, who had just entered the room, could not help joining in.

"Some coins! A key! A small-tooth comb!" continued Cyprien, proceeding with his inventory.

Suddenly he turned pale. His fingers seemed to grasp an exceptional form! No! There could be no doubt of it! And yet he hardly dared to believe in such good fortune!

At length he pulled out his hand, and held up the object he had found.

And what a shout escaped from John Watkins!

"The Star of the South!"

Yes. The famous diamond was recovered intact, and had lost none of its brilliancy. It sparkled in the light from the window like a constellation.

One strange thing about it was noticed at once by all present. It had changed color!

Instead of being black, as formerly, the Star of the South was now rose-color. A beautiful rose, which added, if possible, to its limpidity and splendor.

"Do you think that will damage its value?" asked Watkins, as soon as he could speak, for surprise and delight had almost deprived him of breath.

"Not the least in the world," said Cyprien. "On the contrary, it is an additional peculiarity which classes the stone among the rare family of chameleon diamonds. It does not seem to be very cold in Dada's gizzard, though it is generally due to sudden changes of temperature that we get the alteration in tint of the colored diamonds."

"Ah! At all events, I have found you again, my beauty," said Watkins, clasping the diamond in his hand to assure himself it was not all a dream. "You have caused me so much anxiety by your flight, ungrateful Star, that I shall not let you go again." And he lifted it to his eyes, and he gave such a longing look that he seemed about to swallow it, like another Dada.

Cyprien ordered Bardik to give him a needle threaded with coarse thread, and then he carefully replaced the gizzard of the ostrich. Then he sewed up the incision in

the neck, and then he undid the bandages. Dada, much crestfallen, hung his head, and did not seem disposed to move.

"Do you think he will get over it?" asked Alice, more interested in the sufferings of her favorite than in the reappearance of the diamond.

"Get over it, Miss Watkins?" said Cyprien. "Do you think I should have tried the operation, if I had not been sure he would? In three days he will feel nothing of it, and in two hours he will have filled the curious pouch we have just emptied."

Reassured by the promise, Alice gave the engineer a look of gratitude that fully recompensed him for all his trouble. As she did so, Mr. Watkins had just succeeded in convincing himself that he was in his sober senses, and that he had really recovered his wonderful diamond. He left the window.

"Mr. Cyprien," he said, in majestic and solemn tones, "you have done me a great service, and I do not know how to reward you for it."

Cyprien's heart began to leap.

To reward him! Well, Mr. Watkins, there was a very simple way! Was it so difficult to keep your promise and give your daughter's hand to the man who brought back the Star of the South? Was it not the same as if he had brought it from the depths of the Transvaal?

So Cyprien thought, but he was too proud to speak. And, besides, he thought the same idea might occur to the farmer. But Watkins said nothing at all about it, and having beckoned to his daughter, left the hut, and returned to the farm.

It need hardly be said that a few minutes afterward Mataki was set free. But he had had a narrow escape of paying with his life for the greediness of Dada, and had got off unexpectedly well.

CHAPTER XXIII
THE HOUR OF TRIUMPH

THE fortunate John Watkins, now the richest farmer in Griqualand, having already given a dinner in honor of the birth of the Star of the South, considered that he could not do better than give another in honor of its restoration. This time, however, precautions were taken against a disappearance, and Dada was not one of the guests.

The dinner took place in the afternoon of the day after that on which the Star was recovered. Watkins had invited all his friends, of high and low degree. He had ordered from the butcher sufficient meat to feed a squadron of dragoons, and bought up all the wines, liquors, and provisions, preserved and otherwise, that the neighborhood could furnish.

By four o'clock the table was laid in the large room, the wine was ready on the sideboard, and the beef and mutton were roasting at the fire. At six o'clock the guests arrived, all dressed in their very best. At seven the diapason of conversation had attained such volume that a trumpet would have had hard work to make itself heard above the uproar. There was Mathys Pretorius, who had regained his equanimity now that he had no longer to fear the persecutions of Pantalacci; there was Thomas Steel, the picture of health and strength; there was Nathan the broker; and there were the farmers, the diggers and all the leading tradesmen of Vandergaart Kopje.

Cyprien, thanks to Alice's commands, had not been able to decline his invitation, and Alice herself was, of course, present. And both of them were very miserable, for the "more than millionaire," John Watkins, could no longer dream of giving his daughter to "a mere engineer, who did not even know how to make a diamond!"

Thus did the worthy egotist speak of the man to whom he owed his newly-found wealth.

The dinner proceeded amid the unrestrained enthusiasm of the diners. In front of the fortunate farmer—and not behind him, as on the former occasion—the Star of the

South reposed on a tiny cushion of blue velvet. It was placed inside a glass globe, and the glass was inside a cage of substantial iron bars. Ten toasts had already been drunk to its beauty, to its incomparable limpidity, to its unequaled brilliancy. The heat was overpowering.

Isolated and meditative, Miss Watkins seemed unconscious of the tumult around her. She looked at Cyprien, and the tears began to gather in her eyes. Suddenly three loud knocks were heard at the door. The noise was instantly hushed.

"Come in!" shouted Watkins, "whoever you are. If you are thirsty, you are just in time."

The door opened. The long, lean figure of Jacobus Vandergaart appeared in the doorway.

The guests looked at each other in surprise. The animosity between Watkins and Vandergaart was so notorious that a murmur of expectancy ran around the table. Every one anticipated something serious. Every sound was hushed! Every eye was turned on the old lapidary. Standing erect, with his arms crossed, with his silver locks escaping from beneath his hat, with his long black coat that he wore only on high days and holidays, he seemed the very spirit of revenge.

John Watkins was seized with a vague terror, and a secret shudder passed through him. He turned pale, notwithstanding the fiery tint with which his devotions at the alcoholic shrine had been repaid. He seemed to struggle against some unaccountable presentiment as he broke silence with, "Well, it is a long time, neighbor Vandergaart, since you gave me the chance of seeing you in my house. What good wind has blown you here this evening?"

"The wind of justice," said the old man coldly. "I come to tell you that right has triumphed after an eclipse of seven years! I come to tell you that the hour of atonement has struck, that I take back my own again, and that the Kopje, which has always borne my name, is now mine in law as it always has been mine in equity! John Watkins, you have been stripped of what belongs to me! Today it is you whom the law has despoiled and condemned to give back what you took from me!"

When Watkins first caught sight of Vandergaart and

the vague fear of danger stole over him he felt the blood run cold in his veins; but now the danger had become distinct and defined, his sanguine, violent temperament made him advance to meet it.

And so, lolling back in his arm-chair, he said, with a scornful laugh, "The good man is mad! I always thought he was cracked, and it seems that the hole has got bigger!"

The guests applauded the pleasantry. Vandergaart remained impassive. "He laughs best who laughs last," said he, as he drew a folded paper from his pocket. "John Watkins, you know that a formal judgment, confirmed on appeal, so that the Queen herself could not put it aside, assigned to you the land in this district lying to the west of the twenty-fifth degree of east longitude, and assigned to me all that lying to the east of that meridian?"

"Precisely so, my worthy historian," exclaimed John Watkins; "and you would spend your time much better at home in bed than in coming here and interrupting a lot of fellows at their dinner who do not happen to owe a farthing to any one."

Vandergaart unfolded the paper. "This is a certificate," continued he, in his mildest voice, "of the Lands Department, countersigned by the governor, and duly registered at Victoria the day before yesterday, to the effect that there is a serious error in all the existing maps and plans of Griqualand. The error was committed ten years ago by the surveyors who plotted the district, and who forgot to make the necessary allowance for magnetic variation in their determination of the true north. The error affects every map and plan of the district they surveyed. The rectification of that error, which has now been made, takes the twenty-fifth degree of longitude three miles farther west. That rectification reinstates me in possession of the Kopje which was adjudged to you—for, in the opinion of the lawyers and of the chief justice himself, the original judgment still stands! That, Mr. Watkins, is what I came here to tell you!"

Whether it was that the farmer had imperfectly understood, or that he simply refused to understand, he again tried to answer the lapidary with a scornful laugh. But this time the laugh sounded hollow, and received no echo from those around the table. The witnesses of the scene

sat lost in astonishment, with their eyes fixed on Vandergaart, apparently as much struck by his gravity and assurance as by the confidence he evidently felt.

Nathan was the first to break silence, and give expression to the general feeling. "There is nothing absurd, at first sight, in what Vandergaart has said. The error might have been made in the longitude after all, and before doing anything either way, it may be as well to wait for further proofs."

"Wait for proofs!" exclaimed Watkins, slapping his fist down on the table. "I don't want any proofs! I laugh at your proofs! Is this my house or is it not? Have I not been maintained in possession of the Kopje by a definite judgment, of which even this old crocodile recognizes the validity? Well, what does anything else matter to me? If I am to be molested in the peaceful possession of my own, I'll do what I did before, I'll go to the courts, and we'll soon see who'll win!"

"The courts," replied Vandergaart, with his inexorable moderation, "have done all they can. There is now only a question of fact. Does the twenty-fifth degree of longitude run where it says it does on the plans, or does it not? And it has been officially decided that it does not; that there has been a mistake in the matter; and the conclusion is inevitable that the Kopje must be given back to me." And so saying, Vandergaart displayed the official certificate, with all its seals and signatures.

The farmer's embarrassment became manifestly serious. He fidgeted in his chair. He tried to laugh, and the attempt failed. His eyes by chance rested on the Star of the South. The sight seemed to restore the confidence that was fast forsaking him.

"And if so," he replied, "if in defiance of all right and justice the property legally given to me, and peacefully enjoyed by me for the last seven years, has to be given back, what does it matter? Have I not something to console me in that solitary gem, which I can put in my waistcoat pocket and snap my fingers at the world?"

"You are wrong again, John Watkins," answered Vandergaart very decidedly. "The Star of the South is now mine by the same title as that by which I hold the Kopje.

Everything is mine—your house and all it contains. And I am prepared to take it, as you see!"

And Vandergaart clapped his bony hands, and a file of police appeared at the open door, and a sheriff's officer stepped in, seized a chair, and took possession in all due form. The guests had risen. The farmer remained in his chair, looking as crushed and helpless as if he had been struck by lightning.

Alice had thrown her arm around his neck, and was trying in vain to comfort him. Vandergaart never took his eyes off him. In his glance there was more of pity than of hate, as he followed the look which the farmer gave the Star of the South, now sparkling more brilliantly than ever in the center of the scene of disaster.

"Ruined! Ruined!" The words were all that escaped from the farmer's quivering lips.

And then arose Cyprien. "Mr. Watkins," he said, "now that your prosperity seems to be under a cloud, perhaps you will allow me to take advantage of the opportunity that offers. I have the honor to ask for your daughter's hand!"

CHAPTER XXIV

THE FATE OF THE STAR

THE effect of the engineer's speech was truly gratifying. Its complete disinterestedness touched the not very sensitive hearts of the guests, and there was a round of noisy applause.

Alice, with her eyes cast down and her heart beating violently, seemed the only one that betrayed no surprise at her lover's proceedings; and she remained silent by her father's side. Watkins, still crushed by his terrible misfortune, raised his head. He knew enough of Cyprien to know that if he gave him his daughter, her happiness would be assured, but he would not yet admit that he saw no objection to the marriage. Cyprien, confused at the publicity to which his ardor had committed him, grew conscious of the strangeness of the position, and wished he had remained more master of his feelings.

The silence of mutual embarrassment was ended by

Vandergaart, who stepped toward the farmer. "John Watkins," said he, "I do not wish to abuse my victory, and I am not one of those that strike a man when he is down. In vindicating my right, I have only done my duty. But I know by experience that right may sometimes border closely on injustice, and I do not wish to visit your sins on the heads of those who are innocent. Besides, I am alone in the world, and not so very far from my grave. What is the use of so much wealth, if I cannot dispose of it? If, Watkins, you agree to the match between these two youngsters, I will give them the Star of the South as a wedding present! And I will make them my heirs; and thus, as fully as I can, repair the involuntary injury I have done to your daughter!"

At these words a murmur of sympathetic interest ran around the assemblage. Every one looked at John Watkins. His eyes seemed to glisten as he shaded them with his trembling hand. "Jacobus Vandergaart!" he cried, unable to restrain the tumultuous feelings which agitated him. "Yes! You are a real good fellow, and in thus ensuring the young people's happiness you have nobly avenged the wrong I did you."

Neither Alice nor Cyprien could find words to reply, but their looks spoke for them. The old man held out his hand to his enemy, and Watkins clasped it eagerly. And every eye was moist; even the old police-sergeant, who looked as dry as an Admiralty biscuit, found it necessary to cough and use his handkerchief.

Watkins seemed quite a different man. His expression had changed to be as kindly and gentle as it had hitherto been hard and heartless. And Vandergaart had resumed his wonted look of placid good-nature. "Let us forget and forgive," said he, "and let us wish the young couple every happiness."

The storm having thus passed away, Vandergaart took his place at the table, and began to talk to Watkins of his plans for the future.

"Let us sell everything and go with the youngsters to Europe. We could settle near them, do some good with our money, and end our days in peace."

Meanwhile the temperature continued to rise, the air becoming more and more oppressive, and converting the

guests into so many electrical machines. In vain the windows and the doors were thrown open. Not a breath caused a candle-flame to flicker. Such pressure could only end in one way—there would be a storm with heavy thunder and torrential rain, and the relief that the storm would give was eagerly awaited.

Suddenly a blinding flash threw a sickly tint over all, and instantly the roar of the thunder, as it rolled over the plain, announced that the concert had begun. At the same moment a furious squall burst into the room and blew out all the lights. Then the cataracts of heaven were opened and the deluge commenced.

"Did you hear that sharp click after the thunderclap?" asked Thomas Steel, while the windows were being shut and the candles relighted. "I thought a glass globe had cracked."

Immediately all eyes instinctively turned toward the Star of the South. The diamond had vanished!

But neither the iron cage nor the glass globe that covered it had changed its position. It was manifestly impossible that any one could have touched it.

The phenomenon seemed to verge on the miraculous. Cyprien eagerly leaned forward and noticed on the velvet cushion in place of the diamond, a little mound of ashy powder. He could not restrain a shout of surprise, and in a word told what had happened, "The Star of the South has crumbled into dust!"

Every one in Griqualand knows that this curious property is peculiar to the diamonds of the district. Though not often mentioned it is nevertheless true that, owing to some hitherto unintelligible molecular action, the most precious of the gems will sometimes fly to pieces like a bombshell, and leave nothing behind but a tiny pinch of dust, that may or may not be of use for industrial purposes.

The engineer was evidently thinking more of the scientific interest of the accident than of the enormous pecuniary loss it meant for him. "What is very curious," he said, while all looked on amazed, "is not so much that the stone has crumbled up, but that it should have waited till today to go off. Diamonds generally break up so

much sooner after cutting. About ten days is the usual time, is it not, Mr. Vandergaart?"

"That is so, and it is the first time in my life that I ever saw a diamond go three months after it had been cut!" said the old man with a sigh. "You see, it was destined that the Star of the South should belong to nobody. When I think that we might have prevented the disaster, had we given the diamond a trifling coat of grease—"

"Really?" exclaimed Cyprien, with the satisfaction of a man who at last sees a way out of a difficulty. "Then I can explain it all. The poor fragile Star received the coating of grease in Dada's gizzard, and that is why it lasted till today. It might have been much better if it had gone to pieces four months ago, and saved us our scamper across the Transvaal!"

Watkins seemed very ill at ease in his arm-chair, and now he broke out with, "How can you take things so coolly? There you are, talking about the millions gone in smoke as if they were only a cigarette!"

"That shows we are philosophers," said Cyprien. "There is nothing like being wise when wisdom has become a necessity."

"Philosophers if you like," said the farmer. "But millions are millions, and you don't pick them up every day. Ah, Jacobus! you have done me a greater service than you think. I am afraid I should have gone off like a bombshell had the Star still been mine."

"Why should it matter?" said Cyprien, with a tender look at Alice's sunny face. "I have this evening won so precious a diamond that the loss of no other can trouble me."

And thus ended, in a way well worthy of its brief and troubled history, the career of the largest cut diamond the world has seen.

THE END.

The Purchase of the North Pole

or

Earth Topsy Turvy

A Sequel to a Trip to the Moon

The Purchase of the North Pole

CHAPTER I

THE NORTH POLAR PRACTICAL ASSOCIATION

AND so, Mr. Maston, you consider that a woman can do nothing for the advance of the mathematical or experimental sciences?"

"To my extreme regret, Mrs. Scorbitt," said J. T. Maston, "I am obliged to say so. That there have been many remarkable female mathematicians, especially in Russia, I willingly admit; but with her cerebral conformation it is not in a woman to become an Archimedes or a Newton."

"Then, Mr. Maston, allow me to protest in the name of my sex—"

"Sex all the more charming, Mrs. Scorbitt, from its never having taken to transcendental studies!"

"According to you, Mr. Maston, if a woman had seen an apple fall she would never have been able to discover the laws of universal gravitation as did the illustrious Englishman at the close of the seventeenth century!"

"In seeing an apple fall, Mrs. Scorbitt, a woman would have only one idea—to eat it, after the example of our mother Eve."

"You deny us all aptitude for the higher speculations—"

"All aptitude? No, Mrs. Scorbitt. But I would ask you to remember that since there have been people on this earth, and women consequently, there has never been discovered a feminine brain to which we owe a discovery in the domain of science analogous to the discoveries of Aristotle, Euclid, Kepler, or Laplace."

"Is that a reason? Is it inevitable that the future should be as the past?"

"Hum! That which has not happened for thousands of years is not likely to happen."

"Then we must resign ourselves to our fate, Mr. Maston. And as we are indeed good—"

"And how good!" interrupted J. T. Maston, with all the amiable gallantry of which a philosopher crammed with x was capable.

Mrs. Scorbitt was quite ready to be convinced. "Well, Mr. Maston," she said, "each to his lot in this world. Remain the extraordinary mathematician that you are. Give yourself entirely to the problems of that immense enterprise to which you and your friends have devoted their lives! I will remain the good woman I ought to be, and assist you with the means."

"For which you will have our eternal gratitude," said J. T. Maston.

Mrs. Scorbitt blushed deliciously, for she felt, if not for philosophers in general, at least for J. T. Maston, a truly strange sympathy. Is not a woman's heart unfathomable?

An immense enterprise it was which this wealthy American widow had resolved to support with large sums of money. The object of its promoters was as follows:

The Arctic territories, properly so called, according to the highest geographical authorities, are bounded by the seventy-eighth parallel, and extend over fourteen hundred thousand square miles, while the seas extend over seven hundred thousand.

Within this parallel have intrepid modern discoverers advanced nearly as far as the eighty-fourth degree of latitude, revealing many a coast hidden beyond the lofty chain of icebergs, giving names to capes, promontories, gulfs, and bays of these vast Arctic highlands. But beyond this eighty-fourth parallel is a mystery, the unrealizable desideratum of geographers. No one yet knows if land or sea lies hidden in that space of six degrees, that impassable barrier of Polar ice.

In this year, 189—, the United States Government had unexpectedly proposed to put up to auction the circumpolar regions then remaining undiscovered, having been urged to this extraordinary step by an American society which had been formed to obtain a concession of the apparently useless tract.

Some years before, the Berlin Conference had formu-

lated a special code for the use of Great Powers wishing to appropriate the property of another under pretext of colonization or opening up commercial routes. But this code was not applicable, under the circumstances, as the Polar domain was not inhabited. Nevertheless, as that which belongs to nobody belongs to all, the new society did not propose to "take" but to "acquire."

In the United States there is no project so audacious for which people cannot be found to guarantee the cost and find the working expenses. This was well seen when a few years before the Gun Club of Baltimore had entered on the task of despatching a projectile to the Moon, in the hope of obtaining direct communication with our satellite. Was it not these enterprising Yankees who had furnished the larger part of the sums required by this interesting attempt? And if it had succeeded, would it not be owing to two of the members of the said club who had dared to face the risk of an entirely novel experiment?

If a Lesseps were one day to propose to cut a gigantic canal through Europe and Asia, from the shores of the Atlantic to the China Sea; if a well-sinker of genius were to offer to pierce the earth in the hopes of finding and utilizing the beds of silicates supposed to be there in a fluid state; if an enterprising electrician proposed to combine the currents disseminated over the surface of the globe so as to form an inexhaustible source of heat and light; if a daring engineer were to have the idea of storing in vast receptacles the excess of summer temperature, in order to transfer it to the frozen regions in the winter; if a hydraulic specialist were to propose to utilize the force of the tide for the production of heat or power at will; if companies were to be formed to carry out a hundred projects of this kind—it is the Americans who would be found at the head of the subscribers, and rivers of dollars would flow into the pockets of the projectors, as the great rivers of North America flow into—and are lost in—the ocean.

It was only natural that public opinion should be much exercised at the announcement that the Arctic regions were to be sold to the highest bidder, particularly as no public subscription had been opened with a view to the purchase, for "all the capital had been subscribed in advance," and,

"it was left for Time to show how it was proposed to utilize the territory when it had become the property of the purchaser!"

Utilize the Arctic regions! In truth such an idea could only have originated in the brain of a madman!

But nevertheless nothing could be more serious than the scheme.

In fact, a communication had been sent to many of the journals of both continents, concluding with a demand for immediate inquiry on the part of those interested. It was the *New York Herald* that first published this curious farrago, and the innumerable patrons of Gordon Bennett read, on the morning of the 7th of November, the following advertisement, which rapidly spread through the scientific and industrial world, and became appreciated in very different ways:

"NOTICE TO THE INHABITANTS OF THE TERRESTRIAL GLOBE.

"The regions of the North Pole situated within the eighty-fourth degree of north latitude have not yet been utilized, for the very good reason that they have not yet been discovered.

"The furthest points attained by the navigators of different nations are the following: 82° 45′, said to have been reached by the Englishman, Parry, in July, 1847, in long. 28° E. north of Spitzbergen; 83° 20′ 28″, said to have been reached by Markham in the English expedition of Sir John Nares, in May, 1876, in long. 50° W. north of Grinnell Land; 83°. 35′, said to have been reached by Lockwood and Brainard in the American expedition of Lieutenant Greely, in May, 1882, in long. 42° W. in the north of Nares' Land.

"It can thus be considered that the region extending from the eighty-fourth parallel to the Pole is still undivided among the different States of the globe. It is, therefore, excellently adapted for annexation as a private estate after formal purchase in public auction.

"The property belongs to nobody by right of occupation, and the Government of the United States of America, having been applied to in the matter, have undertaken to

name an official auctioneer for the purpose of its disposal.

"A company has been formed at Baltimore, under the title of the North Polar Practical Association, which proposes to acquire the region by purchase, and thus obtain an indefeasible title to all the continents, islands, islets, rocks, seas, lakes, rivers, and watercourses whatsoever of which this Arctic territory is composed, although these may be now covered with ice, which ice may in summer-time disappear.

"It is understood that this right will be perpetual and indefeasible, even in the event of modification—in any way whatsoever—of the geographical or meteorological conditions of the globe.

"The project having herewith been brought to the knowledge of the people of the two worlds, representatives of all nations will be admitted to take part in the bidding, and the property will be adjudged to the highest bidder.

"The sale will take place on the 3rd of December of the present year in the Auction Mart at Baltimore, Maryland, United States of America.

"For further particulars apply to William S. Forster, provisional agent of the North Polar Practical Association, 93 High Street, Baltimore."

It may be that this communication will be considered as a madman's freak; but at any rate it must be admitted that in its clearness and frankness it left nothing to be desired. The serious part of it was that the Federal Government had undertaken to treat a sale by auction as a valid concession of these undiscovered territories.

Opinions on the matter were many. Some readers saw in it only one of those prodigious outbursts of American humbug, which would exceed the limits of puffism if the depths of human credulity were not unfathomable. Others thought the proposition should be seriously entertained. And these laid stress on the fact that the new company had not appealed to the public for funds. It was with their own money that they sought to acquire the northern regions. They did not seek to drain the dollars and bank-notes of the simple into their coffers. No! All they asked was to pay with their own money for their circumpolar property! This was indeed extraordinary!

To those people who were fond of figures it seemed that all the said company had to do was to buy the right of the first occupant, but that was difficult, as access to the Pole appeared to be forbidden to man, and the new company would necessarily act with prudence, for too many legal precautions could hardly be taken.

It was noticed that the document contained a clause providing for future contingencies. This clause gave rise to much contradictory interpretation, for its precise meaning escaped the most subtle minds. It stipulated that the right would be perpetual, even in the event of modification in any way whatsoever of the geographical or meteorological conditions of the globe. What was the meaning of this clause? What contingency did it provide for? How could the earth ever undergo a modification affecting its geography or meteorology, especially in the territories in question?

"Evidently," said the knowing ones, "there is something in this!"

Explanations there were many to exercise the ingenuity of some and the curiosity of others.

The *Philadelphia Ledger* made the following suggestion: "The future acquirers of the Arctic regions have doubtless ascertained by calculation that the nucleus of a comet will shortly strike the earth in such a manner that the shock will produce the geographical and meteorological changes for which the clause provides."

This sounded scientific, but it threw no light on the matter. The idea of a shock from such a comet did not commend itself to the intelligent. It seemed inadmissible that the concessionaries should have prepared for so hypothetical an eventuality.

"Perhaps," said the *New Orleans Delta,* "the new company imagine that the precession of the equinoxes will produce the modification favorable to the utilization of their new property."

"And why not," asked the *Hamburger Correspondent,* "if the movement modifies the parallelism of the axis of our spheroid?"

"In fact," said the Paris *Revue Scientifique,* "did not Adhemar say, in his book on the revolutions of the sea, that the precession of the equinoxes, combined with the

secular movement of the major axis of the terrestrial orbit, would be of a nature to bring about, after a long period, a modification in the mean temperature of the different parts of the Earth, and in the quantity of ice accumulated at the Poles?"

"That is not certain," said the *Edinburgh Guardian*, "and even if it were so, would it not require a lapse of twelve thousand years for Vega to become our pole-star, in accordance with the said phenomenon, and for the Arctic regions to undergo a change in climate?"

"Well," said the *Copenhagen Dagblad*, "in twelve thousand years it will be time enough to subscribe the money. Meanwhile we do not intend to risk a krone."

But although the *Revue Scientifique* might be right with regard to Adhemar, it was probable that the North Polar Practical Association had never reckoned on a modification due to the precession of the equinoxes. And no one managed to discover the meaning of the clause, or the cosmical change for which it provided.

To ascertain what it meant application might perhaps be made to the directorate of the new company? Why not apply to its chairman? But the chairman was unknown! Unmentioned, too, were the secretary and directors. There was nothing to show from whom the advertisement emanated. It had been brought to the office of the *New York Herald* by a certain William S. Forster, of Baltimore, a worthy agent for codfish, acting for Ardrinell and Co., of Newfoundland, and evidently a man of straw. He was as mute on the subject as the fish consigned to his care, and the cleverest of reporters and interviewers could get nothing out of him.

But if the promoters of this industrial enterprise persisted in keeping their identity a mystery, their intentions were indicated clearly enough.

They intended to acquire the freehold of that portion of the Arctic regions bounded by the eighty-fourth parallel of latitude, with the North Pole as the central point.

Nothing was more certain than that among modern discoverers only Parry, Markham, Lockwood and Brainard had penetrated within a degree of this parallel. Other navigators of the Arctic seas had all halted far below it. Payer, in 1874, had stopped at 82° 15′, to the north of

Franz Joseph Land and Nova Zembla; De Long, in the *Jeannette* expedition in 1879, had stopped at 78° 45′, in the neighborhood of the islands which bear his name. Others, by way of New Siberia and Greenland, in the latitude of Cape Bismarck, had not advanced beyond the 76th, 77th, and 79th parallels; so that by leaving a space of twenty-five minutes between Lockwood and Brainard's 83° 35′ and the 84° mentioned in the prospectus, the North Polar Practical Association would not encroach on prior discoveries. Its project affected an absolutely virgin soil, untrodden by human foot.

The area of the portion of the globe within this eighty-fourth parallel is tolerably large.

From 84° to 90° there are six degrees, which, at sixty miles each, give a radius of 360 miles and a diameter of 720 miles. The circumference is thus 2216 miles, and the area, in round numbers, 407,000 square miles. This is nearly a tenth of the whole of Europe—a good-sized estate!

The advertisement, it will have been noticed, assumed the principle that regions not known geographically and belonging to nobody in particular belonged to the world at large. That the majority of the Powers would admit this contention was supposable, but it was possible that States bordering on these Arctic regions, or considering the regions as the prolongation of their dominions toward the north, might claim a right of possession. And their pretensions would be all the more justified by the discoveries that had been made having been chiefly due to these regions; and of course the Federal Government, as nominators of the auctioneer, would give these Powers an opportunity of claiming compensation, and satisfy the claim with the money realized by the sale. At the same time, as the partisans of the North Polar Practical Association continually insisted, the property was uninhabited, and as no one occupied it, no one could oppose its being put up to auction.

The bordering States with rights not to be disregarded were six in number—Great Britain, the United States, Denmark, Sweden and Norway, Holland, and Russia. But there were other countries that might put in a claim on the ground of discoveries made by their navigators.

France might, as usual, have intervened on account of a few of her children having taken part in occasional expeditions. There was the gallant Bellot, who died in 1853 near Beechy Island, during the voyage of the *Phœnix*, sent in search of Sir John Franklin. There was Dr. Octave Pavy, who died in 1884 at Cape Sabine, during the stay of the Greely expedition at Fort Conger. And there was the expedition in 1838-39, which took to the Spitzbergen Seas, Charles Martins and Marmier and Bravais, and their bold companions. But France did not propose to meddle in the enterprise, which was more industrial than scientific; and, at the outset, she abandoned any chance she might have of a slice of the Polar cake.

It was the same with Germany. She could point to the Spitzbergen expedition of Frederick Martens, and to the expeditions, in 1869-70, of the *Germania* and *Hansa*, under Koldewey and Hegeman, which reached Cape Bismarck on the Greenland coast. But notwithstanding these brilliant discoveries she decided to make no increase to the Germanic empire by means of a slice from the Pole.

So it was with Austria-Hungary, which, however, had her claims on Franz Joseph Land to the northward of Siberia.

As Italy had no right of intervention she did not intervene—which is not quite so obvious as it may appear.

The same happened with regard to the Samoyeds of Siberia, the Eskimos who are scattered along the northern regions of America, the natives of Greenland, of Labrador, of the Baffin Parry Archipelago, of the Aleutian Islands between Asia and America, and of Russian Alaska, which became American in 1867. But these people—the undisputed aborigines of the northern regions—had no voice in the matter. How could such poor folks manage to make a bid at the auction promoted by the North Polar Practical Association? And if they outbid the rest, how could they pay? In shellfish, or walrus teeth, or seal oil? But surely they had some claim on this territory? Strange to say, they were not even consulted in the matter!

Such is the way of the world!

CHAPTER II

TO SYNDICATE OR NOT TO SYNDICATE

If the new company "acquired" the Arctic regions, these regions would, owing to the company's nationality, become for all practical purposes a part of the United States. What would the first inhabitant say? Would the other Powers permit it?

The Swedes and Norwegians were the owners of the North Cape, situated within the seventieth parallel, and made no secret that they considered they had rights extending beyond Spitzbergen up to the Pole itself. Had not Kheilhau, the Norwegian, and Nordenskiold, the celebrated Swede, contributed much to geographical progress in those regions? Undoubtedly.

Denmark was already master of Iceland and the Faroe Isles, besides the colonies in the Arctic regions at Disco, in Davis's Straits; at Holsteinborg, Proven, Godhavn, and Upernavik, in Baffin Sea; and on the western coast of Greenland. Besides, had not Behring, a Dane in the Russian service, passed through in 1728 the straights now bearing his name? And had he not thirteen years afterward, died on the island also named after him? And before him, in 1619, had not Jon Munk explored the eastern coast of Greenland, and discovered many points up to then totally unknown? Was not Denmark to have a voice in the matter?

There was Holland, too. Had not Barents and Heemskerk visited Spitzbergen and Nova Zembla at the close of the sixteenth century? Was it not one of her children, Jan Mayen, whose audacious voyage in 1611 gave her possession of the island named after him situated within the seventy-first parallel?

And how about Russia? Had not Behring been under the orders of Alexis Tschirikof? Had not Paulutski, in 1751, sailed into the Arctic seas? Had not Martin Spanberg and William Walton adventured in these unknown regions in 1739, and done notable exploring work in the straits between Asia and America? Had not Russia her Siberian territories, extending over a hundred and twenty degrees to the limits of Kamtchatka along the Asiatic

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littoral, peopled by Samoyeds, Yakuts, Tchouktchis, and others, and bordering nearly half of the Arctic Ocean? Was there not on the seventy-fifth parallel, at less than nine hundred miles from the Pole, the Liakhov Archipelago, discovered at the beginning of the eighteenth century?

And how about the United Kingdom, which possessed in Canada a territory larger than the whole of the United States, and whose navigators held the first place in the history of the frozen north? Had not the British a right to be heard in the matter?

But, not unnaturally, the British Government considered that they had quite enough to do without troubling themselves about an advertisement in the *New York Herald*. The Foreign Office did not consider the consignee of cod-fish even worthy of a pigeon-hole; and the Colonial Office seemed quite ignorant of his existence until the Secretary's attention was called to the subject, when the official reply was given that the matter was one of purely local interest, in which her Majesty's Government had no intention of concerning themselves.

In Canada, however, some stir was made, particularly among the French; and at Quebec a syndicate was formed for the purpose of competing with the company at Baltimore. The other countries interested followed the Canadian lead. Although the Governments haughtily ignored the audacious proposition, speculative individuals were found in Holland, Scandinavia, Denmark, and Russia to venture sufficient funds for preliminary expenses with a view to acquire imaginary rights that might prove profitably transferable.

Three weeks before the date fixed for the sale the representatives of these various syndicates arrived in the United States.

The only representative of the American company was the William S. Forster whose name figured in the advertisement of the 7th of November.

Holland sent Jacques Jansen, a councillor of the Dutch East Indies, fifty-three years of age, squat, broad, and protuberant, with short arms and little bow legs, aluminium spectacles, face round and red, hair in a mop, and grizzly whiskers—a solid man, not a little incredulous on the

subject of an enterprise whose practical consequences he did not quite see.

The Danish syndicate sent Erik Baldenak, an ex-sub-governor of the Greenland colonies, a man of middle height, somewhat unequal about the shoulders, with a perceptible corporation, a large head, and eyes so short-sighted that everything he read he almost touched with his nose. His instructions were to treat as beyond argument the rights of his country, which was the legitimate proprietor of the Polar regions.

The Swedes and Norwegians sent Jan Harald, professor of cosmography at Christiania, who had been one of the warmest partisans of the Nordenskiold expedition, a true type of the Norseman, with clear, fresh face, and beard and hair of the color of the over-ripe corn. Harald's private opinion was that the Polar cap was covered with the Palæocrystic Sea, and therefore valueless. But none the less, he intended to do the best he could for those who employed him.

The representative of the Russian financiers was Colonel Boris Karkof, half soldier, half diplomatist; tall, stiff, hairy, bearded, mustached; very uncomfortable in his civilian clothes, and unconsciously seeking for the handle of the sword he used to wear. The colonel was very anxious to know what was concealed in the proposition of the North Polar Practical Association, with a view to ascertaining if it would not give rise to international difficulties.

England having declined all participation in the matter, the only representatives of the British Empire were those from the Quebec Company. These were Major Donellan, a French-Canadian, whose ancestry is sufficiently apparent from his name, and a compatriot of his named Todrin. Donellan was tall, thin, bony, nervous, and angular, and of just such a figure as the Parisian comic journals caricature as that of an Englishman. Todrin was the very opposite of the Major, being short and thick-set, and talkative and amusing. He was said to be of Scotch descent, but no trace of it was observable in his name, his character, or his appearance.

The representatives arrived at Baltimore by different steamers. They were each furnished with the needful credit to outbid their rivals up to a certain point; but the

limit differed in each case. The Canadian representatives had command of much the most liberal supplies, and it seemed as though the struggle would resolve itself into a dollar duel between the two American companies.

As soon as the delegates arrived they each tried to put themselves in communication with the North Polar Practical Association unknown to the others. Their object was to discover the motives of the enterprise, and the profit the Association expected to make out of it. But there was no trace of an office at Baltimore. The only address was that of William S. Forster, High Street, and the worthy codfish agent pretended that he knew nothing about it. The secret of the Association was impenetrable.

The consequence was that the delegates met, visited each other, cross-examined each other, and finally entered into communication with a view of taking united action against the Baltimore company. And one day, on the 22nd of November, they found themselves in conference at the Wolseley Hotel, in the rooms of Major Donellan and Todrin, the meeting being due to the diplomatic efforts of Colonel Boris Karkof.

To begin with, the conversation occupied itself with the advantages, commercial or industrial, which the Association expected to obtain from its Arctic domain. Professor Harald inquired if any of his colleagues had been able to ascertain anything with regard to this point; and all of them confessed that they had endeavored to pump William S. Forster without success.

"I failed," said Baldenak.

"I did not succeed," said Jansen.

"When I went," said Todrin, "I found a fat man in a black coat and wearing a stove-pipe hat. He had on a white apron, and when I asked him about this affair, he told me that the *South Star* had just arrived from Newfoundland with a full cargo of fine cod, which he was prepared to sell me on advantageous terms on behalf of Messrs. Ardrinell and Co."

"Eh! eh!" said the Councillor of the Dutch East Indies. "You had much better buy a full cargo of fine cod than throw your money into the Arctic Sea."

"That's not the question," said the Major. "We are not talking of codfish, but of the Polar ice-cap—"

"Which," said Todrin, "the codfishman wants to wear."

"It will give him influenza," said the Russian.

"That is not the question," said the Major. "For some reason or other, this North Polar Practical Association—mark the word 'Practical,' gentlemen—wishes to buy four hundred and seven thousand square miles around the North Pole, from the eighty-fourth—"

"We know all that," said Professor Harald. "But what we want to know is, what do these people want to do with these territories, if they are territories, or these seas, if they are seas—"

"That is not the question," said Donellan. "Here is a company proposing to purchase a portion of the globe which, by its geographical position, seems to belong to Canada."

"To Russia," said Karkof.

"To Holland," said Jansen.

"To Scandinavia," said Harald.

"To Denmark," said Baldenak.

"Gentlemen!" said Todrin, "excuse me, but that is not the question. By our presence here we have admitted the principle that the circumpolar territories can be put up to auction, and become the property of the highest bidder. Now, as you have powers to draw to a certain amount, why should you not join forces and control such a sum as the Baltimore company will find it impossible to beat?"

The delegates looked at one another. A syndicate of syndicates! In these days we syndicate as unconcernedly as we breathe, as we drink, as we eat, as we sleep. Why not syndicate still further?

But there was an objection, or rather an explanation was necessary, and Jansen interpreted the feeling of the meeting when he asked:

"And after?"

Yes! After?

"But it seems to me that Canada—" said Donellan.

"And Russia—" said Karkof.

"And Holland—" said Jansen.

"And Denmark—" said Baldenak.

"Don't quarrel, gentlemen," said Todrin. "What is the good? Let us form our syndicate."

"And after?" said Harald.

"After?" said Todrin. "Nothing can be simpler, gentlemen. When you have bought the property it will remain indivisible among you, and then for adequate compensation you can transfer it to one of the syndicates we represent; but the Baltimore company will be out of it."

It was a good proposal, at least for the moment, for in the future the delegates could quarrel among themselves for the final settlement. Anyway, as Todrin had justly remarked, the Baltimore company would be out of it.

"That seems sensible," said Baldenak.

"Clever," said Karkof.

"Artful," said Harald.

"Sly," said Jansen.

"Quite Canadian," said Donellan.

"And so, gentlemen," said Karkof, "it is perfectly understood that if we form a syndicate the rights of each will be entirely reserved."

"Agreed."

It only remained to discover what sums had been placed to the credit of the delegates by the several associations, which amounts when totaled would probably exceed anything at the disposal of the North Polar Practical people.

The question was asked by Todrin.

But then came a change over the scene. There was complete silence. No one would reply. Open his purse, empty his pocket into the common cash-box, tell in advance how much he had to bid with—there was no hurry to do that! And if disagreement arose later on, if circumstances obliged the delegates to look after themselves, if the diplomatic Karkof were to feel hurt at the little wiles of Jansen, who might take offense at the clumsy artifices of Baldenak, who, in turn, became irritated at the ingenuities of Harald, who might decline to support the pretentious claims of Donellan, who would find himself compelled to intrigue against all his colleagues individually and collectively—to proclaim the length of their purses was to reveal their game, which above all things they desired to keep dark.

Obviously there were only two ways of answering Todrin's indiscreet demand. They might exaggerate their resources, which would be embarrassing when they had to

put the money down; or they might minimize them in such a way as to turn the proposition into a joke.

This idea occurred to the Dutchman.

"Gentlemen," said he, "I regret that for the acquisition of the Arctic regions I am unable to dispose of more than fifty gulden."

"And," said the Russian, "all I have to venture is thirty-five roubles."

"I have twenty kroner," said Harald.

"I have only fifteen," said Baldenak.

"Well," said the Major, "it is evident that the profit in this matter will be yours, for all I have at my disposal is the miserable sum of thirty cents."

CHAPTER III

THE NORTH POLE IS KNOCKED DOWN TO THE HIGHEST BIDDER

THAT the sale on the 3rd of December should take place in the Auction Mart might appear strange. As a rule, only furniture, instruments, pictures, and objects of art were sold there. But for this curious departure from the ordinary practice in the sale of land a precedent was discoverable, as already a portion of our planet had changed hands under the hammer.

A few years before, at San Francisco, in California, an island in the Pacific Ocean, Spencer Island, had been sold to the rich W. W. Kolderup, when he outbid J. R. Taskinar, of Stockton. Spencer Island was habitable; it was only a few degrees from the Californian coast; it had forests, watercourses, a fertile soil, and fields and prairies fit for cultivation; it was not an indefinite region, covered perhaps with sea and perpetual ice, which probably no one would ever occupy. For Spencer Island four million dollars had been paid; for the Polar territories it was not to be expected that anything like that amount would be forthcoming.

Nevertheless, the strangeness of the affair had brought together a considerable crowd, chiefly of lookers-on, to witness the result. The sale was to take place at noon, and all the morning the traffic in Bolton Street was seri-

ously interfered with. Long before the hour fixed for the sale the room was full, with the exception of a few seats railed off and reserved for the delegates; and when Baldenak, Karkof, Jansen, Harald, Donellan, and Todrin had taken these places, they formed a compact group, shoulder to shoulder, and looked as if they were a veritable storming column ready for the assault of the Pole.

Close to them was the consignee of codfish, whose vulgar visage expressed the sublimest indifference. He looked the least excited of all the crowd, and seemed to be thinking only of how he could most profitably dispose of the cargoes now on their way to him from Newfoundland. Who were the capitalists represented by this man, with probably millions of dollars at his command?

There was nothing to show that J. T. Maston and Mrs. Scorbitt had anything to do with the affair. How could it be supposed that they had? They were there, though, but lost in the crowd, and were surrounded by a few of the principal members of the Gun Club, apparently simply as spectators and quite disinterested. William S. Forster seemed to have not the least knowledge of their existence.

As it was impossible to hand around the North Pole for the purposes of examination, a large map of the Arctic regions had been hung behind the auctioneer's desk. Seventeen degrees above the Arctic Circle a broad red line around the eighty-fourth parallel marked off the portion of the globe which the North Polar Practical Association had brought to the hammer. According to the map, the region was occupied by a sea covered with an ice-cap of considerable thickness. But that was the affair of the purchasers. At least, no one could complain that they had been deceived as to the nature of the goods.

As twelve o'clock struck, the auctioneer, Andrew R. Gilmour, entered by a little door behind his desk. He surveyed the assembly for an instant through his glasses, and then, calling for silence by a tap from his hammer, he addressed the crowd as follows:

"Gentlemen, I have been instructed by the Federal Government to offer for sale a property situated at the North Pole, bounded by the eighty-fourth parallel of latitude, and consisting of certain continents and seas, either solid or liquid—but which I am not quite sure. Kindly

cast your eyes on this map. It has been compiled according to the latest information. You will see that the area is approximately four hundred and seven thousand square miles. To facilitate the sale it has been decided that the biddings for this extensive region shall be made per square mile. You will therefore understand that every cent bid will represent in round numbers 407,000 cents, and every dollar 407,000 dollars. I must ask you to be silent, gentlemen, if you please."

The appeal was not superfluous, for the impatience of the public was producing a gradually-increasing tumult that would drown the voices of the bidders.

When tolerable quietness had been established, thanks to the intervention of Flint, the auctioneer's porter, who roared like a siren on a foggy day, Gilmour continued:

"Before we begin the biddings, I think it right to remind you of three things. The property has only one boundary, that of the eighty-fourth degree of north latitude. It has a guaranteed title. And it will remain the property of the purchasers, no matter what geographical or meteorological modifications the future may produce."

Always this curious observation!

"Now, gentlemen," said Gilmour; "what offers?" and, giving his hammer a preliminary shake, he continued in a nasal tone, "We will start at ten cents the square mile."

Ten cents, the tenth of a dollar, meant 40,700 dollars for the lot.

Whether Gilmour had a purchaser at this price or not, the amount was quickly increased by Baldenak.

"Twenty cents!" he said.

"Thirty cents!" said Jansen for the Dutchmen.

"Thirty-five!" said Professor Harald.

"Forty!" said the Russian.

That meant 162,800 dollars, and yet the bidding had only begun. The Canadians had not even opened their mouths. And William S. Forster seemed absorbed in the *Newfoundland Mercury*.

"Now, gentlemen," said Gilmour, "any advance on forty cents? Forty cents! Come, the Polar cap is worth more than that; it is—"

What he would have added is unknown; perhaps it was, "guaranteed pure ice"; but the Dane interrupted him with:

"Fifty cents!"

Which the Dutchman at once capped with:

"Sixty!"

"Sixty cents the square mile! Any advance on sixty cents?"

These sixty cents made the respectable sum of 244,200 dollars.

At Jansen's bid, Donellan raised his head and looked at Todrin; but at an almost imperceptible negative sign from him he remained silent.

All that Forster did was to scrawl a few notes on the margin of his newspaper.

"Come, gentlemen," said the auctioneer; "wake up! Surely you are going to give more than that?"

And the hammer began to move up and down, as if in disgust at the weakness of the bidding.

"Seventy cents!" said Harald, in a voice that trembled a little.

"Eighty cents!" said Karkof, almost in the same breath.

A nod from Todrin woke up the Major, as if he were on springs.

"Hundred cents!" said the Canadian.

That meant 407,000 dollars.

Four hundred and seven thousand dollars! A high price to pay for a collection of icebergs, ice-fields, and ice-floes!

And the representative of the North Polar Practical Association did not even raise his eyes from his newspaper. Had he been instructed not to bid? If he had waited for his competitors to bid their highest, surely the moment had come? In fact, their look of dismay when the Major fired his "hundred cents" showed that they had abandoned the battle.

"A hundred cents the square mile!" said the auctioneer. "Any advance? Is that so? Is that so? No advance?"

And he took a firm grasp on his hammer, and looked around him.

"Once!" he continued. "Twice! Any advance?"

"A hundred and twenty cents!" said Forster, quietly, as he turned over a page of his newspaper.

"And forty!" said the Major.

"And sixty!" drawled Forster.

"And eighty!" drawled the Major, quite as placidly.

"A hundred and ninety!" said Forster.

"And five!" said the Major, as if it were a mere casual observation.

You might have heard an ant walk, a bleak swim, a moth fly, a worm wriggle, or a microbe wag its tail—if it has a tail.

Gilmour allowed a few moments to pass, which seemed like centuries. The consignee of codfish continued reading his newspaper and jotting down figures on the margin which had evidently nothing to do with the matter on hand. Had he reached the length of his tether? Had he made his last bid? Did this price of 195 cents the square mile, or 793,050 dollars for the whole, appear to him to have reached the last limit of absurdity?

"One hundred and ninety-five cents!" said the auctioneer. "Going at one hundred and ninety-five cents!"

And he raised his hammer.

"One hundred and ninety-five cents! Going! Going!"

And every eye was turned on the representative of the North Polar Practical Association.

That extraordinary man drew a large handkerchief from his pocket, and, hiding his face in it, blew a long, sonorous blast with his nose.

Then J. T. Maston looked at him, and Mrs. Scorbitt's eyes took the same direction. And by the paleness of their features it could be seen how keen was the excitement they were striving to subdue. Why did Forster hesitate to outbid the Major?

Forster blew his nose a second time; then, with an even louder blast, he blew it a third time. And between the blasts he quietly observed:

"Two hundred cents!"

A shudder ran through the hall.

The Major seemed overwhelmed, and fell back against Todrin. At this price per square mile, the Arctic regions would cost 814,000 dollars. The Canadian limit had evidently been passed.

"Two hundred cents!" said Gilmour. "Once! Twice! Any advance?" he continued.

The Major looked at the Professor, and the Colonel, and the Dutchman, and the Dane; and the Professor, and

the Colonel, and the Dutchman, and the Dane looked at the Major.

"Going! Going!" said the auctioneer.

Everyone looked at the codfish man.

"Gone!"

And down came Gilmour's hammer.

The North Polar Practical Association, represented by William S. Forster, had become the proprietors of the North Pole and its promising neighborhood. And when William S. Forster had to name the real purchasers, he placidly drawled, "Barbicane & Co.!"

CHAPTER IV

OLD ACQUAINTANCES

BARBICANE & Co.! The president of the Gun Club! What was the Gun Club going to do with the North Pole? We shall see.

Is it necessary formally to introduce Impey Barbicane, the president of the Gun Club, and Captain Nicholl, and J. T. Maston, and Tom Hunter with the wooden legs, and the brisk Bilsby, and Colonel Bloomsberry and their colleagues? No! Although twenty years had elapsed since the attention of the world was concentrated on these remarkable personages, they had remained much as they were, just as incomplete corporeally, and just as obstreperous, just as daring, just as wrapped up in themselves as when they had embarked in their extraordinary adventure. Time had made no impression on the Gun Club; it respected them as people respect the obsolete cannon that are found in the museums of old arsenals.

If the Gun Club comprised 1833 members at its foundation—that is persons and not limbs, for a number of these were missing—if 30,575 correspondents were proud of their connection with the club, the number had in no way decreased. On the contrary, thanks to the unprecedented attempt they had made to open communication with the Moon, as related in the Moon Voyage, its celebrity had increased enormously.

It will be remembered that a few years after the War of Secession certain members of the Gun Club, tired of

doing nothing, had proposed to send a projectile to the Moon by means of a monster Columbiad. A gun nine hundred feet long had been solemnly cast at Tampa Town, in the Floridan peninsula, and loaded with 400,000 lbs. of fulminating cotton. Shot out by this gun, a cylindro-conical shell of aluminium had been sent flying among the stars of the night under a pressure of six million millions of litres of gas. Owing to a deviation of the trajectory, the projectile had gone around the Moon and fallen back to the earth, dropping into the Pacific Ocean in lat. 27° 7′ N., long. 141° 37′ west; when the frigate *Susquehanna* had secured it, to the great satisfaction of its passengers.

Of its passengers, two members of the Gun Club, the president, Impey Barbicane, and Captain Nicholl, with a hare-brained Frenchman, had taken passage in the projectile and had all returned from the voyage safe and sound. But if the two Americans were then present ready to risk their lives in some new adventure, it was not so with Michel Ardan. He had returned to Europe, and made a fortune, and was now planting cabbages in his retirement, if the best-informed reporters were to be believed.

Barbicane and Nicholl had also retired, comparatively speaking, but they had retired only to dream of some new enterprise of a similar character. They were in no want of money. From their last undertaking there remained nearly two hundred thousand dollars out of the five millions and a half yielded by the public subscriptions of the old and new worlds; and by exhibiting themselves in their aluminium projectile throughout the United States they had realized enough wealth and glory to satisfy the most exacting of human ambitions. They would have been content if idleness had not been wearisome to them; and it was probably in order to find something to do that they had now bought the Arctic regions.

But it should not be forgotten that if they had paid for their purchase eight hundred thousand dollars and more, it was because Evangelina Scorbitt had advanced the balance they required.

Although Barbicane and Nicholl enjoyed incomparable celebrity, there was one who shared it with them. This was J. T. Maston, the impetuous secretary of the Gun Club. Was it not this able mathematician who had made

the calculations which had enabled the great experiment to be made? If he had not accompanied his two colleagues on their extraordinary voyage, it was not from fear; certainly not! But the worthy gunner wanted a right arm, and had a gutta-percha cranium, owing to one of those accidents so common in warfare; and if he had shown himself to the Selenites it might have given them an erroneous idea of the inhabitants of the Earth, of which the Moon after all is but the humble satellite.

To his profound regret J. T. Maston had had to resign himself to staying at home. But he was not idle. After the construction of the immense telescope on the summit of Long's Peak, one of the highest of the Rocky Mountains, he had transported himself there, and from the moment he found the projectile describing its majestic trajectory in the sky he never left his post of observation. At the eye-piece of the huge instrument he devoted himself to the task of following his friends as they journeyed in their strange carriage through space.

It might be thought that the bold voyagers were forever lost to earth. The projectile, drawn into a new orbit by the Moon, might gravitate eternally around the Queen of the Night as a sort of sub-satellite. But no! A deviation, which by many was called providential, had modified the projectile's direction, and, after making the circle of the Moon, brought it back from that spheroid at a speed of 17,280 miles an hour at the moment it plunged into the ocean.

Luckily the liquid mass of the Pacific had broken the fall, which had been perceived by the U. S. frigate *Susquehanna*. As soon as the news had reached J. T. Maston, he had set out in all haste from the observatory at Long's Peak to the rescue of his friends. Soundings were taken in the vicinity of where the shell had been seen to fall, and the devoted Maston had not hesitated to go down in diver's dress to find his friends. But such trouble was unnecessary. The projectile being of aluminium, displacing an amount of water greater than its own weight, had returned to the surface of the Pacific after a magnificent plunge. And President Barbicane, Captain Nicholl, and Michel Ardan were found in their floating prison playing dominoes.

The part that Maston took in these extraordinary proceedings had brought him prominently to the front. He was not handsome, with his artificial cranium and his mechanical arm with its hook for a hand. He was not young, for fifty-eight years had chimed and struck at the date of our story's beginning. But the originality of his character, the vivacity of his intelligence, the fire in his eye, the impetuosity with which he had attacked everything, had made him the beau-ideal of a man in the eyes of Evangelina Scorbitt. His brain, carefully protected beneath its gutta-percha roof was intact, and justly bore the reputation of being one of the most remarkable of the day.

Mrs. Scorbitt—though the least calculation gave her a headache—had a taste for mathematicians if she had not one for mathematics. She looked upon them as upon beings of a peculiar and superior species. Heads where x's knocked against x's like nuts in a bag, brains which rejoiced in algebraic formulæ, hands which threw about triple integrals as an equilibrist plays with glasses and bottles, intelligences which understood this sort of thing:

$$\int\int\int \Phi\,(x\,y\,z)\,dx\,dy\,dz$$

—these were the wise men who appeared worthy of all the admiration of a woman, attracted to them proportionally to their mass and in inverse ratio to the square of their distances. And J. T. Maston was bulky enough to exercise on her an irresistible attraction, and as to the distance between them it would be simply zero, if she succeeded in her plans.

It must be confessed that this gave some anxiety to the secretary of the Gun Club, who had never sought happiness in such close approximations. Besides, Evangelina Scorbitt was no longer in her first youth; but she was not a bad sort of person by any means, and she would have wanted for nothing could she only see the day when she was introduced to the drawing-rooms of Baltimore as Mrs. J. T. Maston.

The widow's fortune was considerable. Not that she was as rich as Gould, Mackay, Vanderbilt, or Gordon Bennett, whose fortunes exceed millions, and who could give alms to a Rothschild. Not that she possessed the millions of Mrs. Moses Carper, Mrs. Stewart, or Mrs. Crocker: nor

was she as rich as Mrs. Hammersley, Mrs. Helby Green, Mrs. Maffitt, Mrs. Marshall, Mrs. Para Stevens, Mrs. Mintbury, and a few others. But she was the possessor of four good millions of dollars, which had come to her from John P. Scorbitt, who had made a fortune by trade in fashionable sundries and salt pork. And this fortune the generous widow would have been happy to employ for the advantage of J. T. Maston, to whom she would bring a treasure of tenderness yet more inexhaustible.

At Maston's request, she had cheerfully consented to put several hundreds of thousands of dollars at the disposal of the North Polar Practical Association, without even knowing what it was all about. With J. T. Maston concerned in it she felt assured that the work could not but be grandiose, sublime, super-excellent. The past of the Gun Club's secretary was voucher enough for the future.

It may be guessed, therefore, if she lost confidence when the auctioneer's hammer knocked down the North Pole to Barbicane & Co. While J. T. Maston formed part of the "Co." could she do otherwise than applaud?

And thus it happened that Evangelina Scorbitt found herself chief proprietor of the Arctic regions within the eighty-fourth parallel. But what would she do with them? Or rather, how was the company going to get any benefit out of their inaccessible domain?

That was the question! And if in a pecuniary sense it had much interest for Mrs. Scorbitt, from a curiosity point of view it had quite as much interest for the world at large.

The trusting widow had asked a few questions of Maston before she advanced the funds. But Maston invariably maintained the closest reserve. Mrs. Scorbitt, he remarked, would know soon enough, but not before the hour had come, for she would be astonished at the object of the new association.

Doubtless he was thinking of some undertaking which to quote Jean Jacques, "never had an example, and never will have imitators," of something destined to leave far behind the attempt made by the Gun Club to open up communication with the Moon.

When Evangelina grew somewhat pressing in her inquiries, J. T. Maston had placed his hook on his half-

closed lips, and remarked soothingly, "Have confidence, Mrs. Scorbitt; have confidence!"

And if Mrs. Scorbitt had confidence before the sale, what immense joy she must have experienced at the result! Still she could not help asking the eminent mathematician, what he was going to do next. And though she smiled on him bewitchingly, the eminent mathematician only replied, as he cordially shook her hand, "You will know very soon!"

That shake of the hand immediately calmed the impatience of Mrs. Scorbitt. And a few days later there was another shake, for the old and new worlds were considerably shaken—to say nothing of the shake that was coming—when they learned the project for which the North Polar Practical Association appealed to the public for subscriptions.

The company announced that it had "acquired" the territory for the purpose of working—"the coal-fields at the North Pole"!

CHAPTER V

THE POLAR COAL-FIELD

"But are there any coal-fields at the Pole?" Such was the first question that presented itself.

"Why should there be coal at the Pole?" said some.

"Why should there not be?" said others.

Coal-beds are found in many parts of the world. There is coal in Europe; there is coal in America; and in Africa; and in Asia; and in Oceania. As the globe is more and more explored, beds of fossil fuel are revealed in strata of all ages. There is true coal in the primary rocks, and there is lignite in the secondaries and tertiaries.

England alone produces a hundred and sixty millions of tons a year; the world consumes four hundred million tons, and with the requirements of industry there is no decrease but an increase in the consumption. The substitution of electricity for steam as a motive power means the expenditure of coal just the same. The industrial stomach cannot live without coal; industry is a carbonivorous animal and must have its proper food.

Carbon is something else than a combustible. It is the telluric substance from which science draws the major part of the products and sub-products used in the arts. With the transformations to which it is subject in the crucibles of the laboratory you can dye, sweeten, perfume, vaporize, purify, heat, light, and you can produce the diamond.

But the coal-beds from which our carbon at present chiefly comes are not inexhaustible. And the well-informed people who are in fear for the future are looking about for new supplies wherever there is a probability of their existence.

"But why should there be coal at the Pole?"

"Why?" replied the supporters of President Barbicane. "Because in the carboniferous period, according to a well-known theory, the volume of the Sun was such that the difference in temperature between the Equator and the Poles was inappreciable. Immense forests covered the northern regions long before the appearance of man, when our planet was subject to the prolonged influence of heat and humidity."

And this the journals, reviews, and magazines that supported the North Polar Practical Association insisted on in a thousand articles, popular and scientific. If these forests existed, what more reasonable to suppose than that the weather, the water, and the warmth had converted them into coal-beds?

But in addition to this there were certain facts which were undeniable. And these were important enough to suggest that a search might be made for the mineral in the regions indicated.

So thought Donellan and Todrin as they sat together in a corner of the "Two Friends."

"Well," said Todrin, "can Barbicane be right?"

"It is very likely," said the Major.

"But then there are fortunes to be made in opening up the Polar regions!"

"Assuredly," said the Major. "North America has immense deposits of coal; new discoveries are often being announced, and there are doubtless more to follow. The Arctic regions seem to be a part of the American continent geologically. They are similar in formation and

physiography. Greenland is a prolongation of the new world, and certainly Greenland belongs to America—"

"As the horse's head, which it looks like, belongs to the animal's body," said Todrin.

"Nordenskiold," said Donellan, "when he explored Greenland, found among the sandstones and schists intercalations of lignite with many forest plants. Even in the Disko district, Steenstrup discovered eleven localities with abundant vestiges of the luxuriant vegetation which formerly encircled the Pole."

"But higher up?" asked Todrin.

"Higher up, or farther up to the northward," said the Major, "the presence of coal is extremely probable, and it only has to be looked for. And if there is coal on the surface, is it not reasonable to suppose that there is coal underneath?"

The Major was right. He was thoroughly posted up in all that concerned the geology of the Arctic regions, and he would have held on for some time if he had not noticed that the people in the "Two Friends" were listening to him.

"Are you not surprised at one thing, Major?"

"What is that?"

"That in this affair, in which you would expect to meet with engineers and navigators, you have only to deal with artillerists. What have they to do with the coal-mines of the North Pole?"

"That is rather surprising," said the Major.

And every morning the newspapers returned to this matter of the coal-mines.

"Coal-beds!" said one, "what coal-beds?"

"What coal-beds?" replied another; "why, those that Nares found in 1875 and 1876 on the eighty-second parallel, when his people found the miocene flora rich in poplars, beeches, viburnums, hazels, and conifers."

"And in 1881-1884," added the scientific chronicler of the *New York Witness*, "during the Greely expedition to Lady Franklin Bay, a bed of coal was discovered by our men at Watercourse Creek, close to Fort Conger. Did not Dr. Pavy rightly consider that these carboniferous deposits were apparently destined to be used some day for contending with the cold of that desolate region?"

When these facts were brought forward, it will be easily understood that Impey Barbicane's adversaries were hard up for a reply. The partisans of the "Why should there be coal?" had to lower their flag to the partisans of "Why should there not be?" Yes, there was coal! And probably a considerable amount of it. The circumpolar area contained large deposits of the precious combustible on the site of the formerly luxuriant vegetation.

But if the ground were cut from under their feet regarding the existence of the coal, the detractors took their revenge in attacking the question from another point.

"Be it so!" said the Major one day in the rooms of the Gun Club itself, when he discussed the matter with Barbicane. "Be it so! I admit there is coal there; I am convinced there is coal there. But work it!"

"That we are going to do," said Barbicane tranquilly.

"Get within the eighty-fourth parallel, beyond which no explorer has yet gone!"

"We will get beyond it!"

"Go to the Pole itself!"

"We are going there!"

And in listening to the president of the Gun Club making these cool answers, talking with such assurance, expressing his opinion so haughtily and unmistakably, the most obstinate began to hesitate. They felt they were in the presence of a man who had lost nothing of his former qualities; calm, cool, with a mind eminently serious and concentrated, exact as a chronometer, adventurous, and bringing the most practical ideas to bear on the most daring undertakings. Solid, morally and physically, he was "deep in the water," to employ a metaphor of Napoleon's, and could hold his own against wind or tide. His enemies and rivals knew that only too well.

He had stated that he would reach the North Pole! He would set foot where no human foot had been set before! He would hoist the Stars and Stripes on one of the two spots of earth which remained immovable while all the rest spun around in diurnal rotation!

Here was a chance for the caricaturists! In the windows of the shops and kiosks of the great cities of Europe and America there appeared thousands of sketches and

prints displaying Impey Barbicane seeking the most extravagant means of attaining his object.

Here the daring American, assisted by all the members of the Gun Club, pickaxe in hand, was driving a submarine tunnel through masses of ice, which was to emerge at the very point of the axis.

Here Barbicane, accompanied by J. T. Maston—a very good portrait—and Captain Nicholl, descended in a balloon on the point in question, and, after unheard-of dangers, succeeding in capturing a lump of coal weighing half a pound, which was all the circumpolar deposit contained.

Here J. T. Maston, who was as popular as Barbicane with the caricaturists, had been seized by the magnetic attraction of the Pole, and was fast held to the ground by his metal hook.

And it may be remarked here that the celebrated calculator was of too touchy a temperament to laugh at any jest at his personal peculiarities. He was very much annoyed at it, and it will be easily imagined that Mrs. Scorbitt was not the last to share in his just indignation.

Another sketch, in the Brussels *Magic Lantern*, represented Impey Barbicane and his co-directors working in the midst of flames, like so many incombustible salamanders. To melt the ice of the Palæocrystic Sea, they had poured over it a sea of alcohol, and then lighted the spirit, so as to convert the polar basin into a bowl of punch. And, playing on the word punch, the Belgian designer had had the irreverence to represent the president of the Gun Club as a ridiculous punchinello.

But of all the caricatures, that which obtained the most success was published by the Parisian *Charivari* under the signature of "Stop." In the stomach of a whale, comfortably furnished and padded, Impey Barbicane and J. T. Maston sat smoking and playing chess, waiting their arrival at their destination. The new Jonahs had not hesitated to avail themselves of an enormous marine mammifer, and by this new mode of locomotion had passed under the ice-floes to reach the inaccessible Pole.

The phlegmatic president was not in the least incommoded by this intemperance of pen and pencil. He let the

world talk, and sing, and parody, and caricature; and he quietly went on with his work.

As soon as he had obtained the concession, he had issued an appeal to the public for the subscription of fifteen millions of dollars in hundred-dollar shares. Such was the credit of Barbicane & Co., that applications flowed in wholesale. But it is as well to say that nearly all the applications came from the United States.

"So much the better!" said the supporters of the North Polar Practical Association. "The work will be entirely American."

The prospectus was so plausible, the speculators believed so tenaciously in the realization of its promises, and admitted so imperturbably the existence of the Polar coal-mines, that the capital was subscribed three times over.

Two-thirds of the applications were declined with regret, and on the 16th of December the capital of fifteen millions of dollars was fully paid up. It was about thrice as much as the amount subscribed for the Gun Club when they made their great experiment of sending a projectile from the Earth to the Moon.

CHAPTER VI

A TELEPHONIC CONVERSATION

Not only had Barbicane announced that he would attain his object—and now the capital at his command enabled him to reach it without hindrance—but he would certainly not have appealed for funds if he was not certain of success.

The North Pole was at last to be conquered by the audacious genius of man!

Barbicane and his co-directors had the means of succeeding where so many others had failed. They would do what had not been done by Franklin, Kane, Nares, or Greely. They would advance beyond the eighty-fourth parallel. They would take possession of the vast portion of the globe that had fallen to them under the hammer. They would add to the American flag the forty-third star

for the forty-third state annexed to the American Confederation.

"Rubbish!" said the European delegates.

And the means of conquering the Pole—means that were practical, logical, indisputable, and of a simplicity quite infantine—were the suggestion of J. T. Maston. It was in his brain, where ideas were cooked in cerebral matter in a state of constant ebullition, that there had been conceived this great geographical work, and the means devised of bringing it to a successful issue.

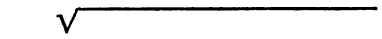
The secretary of the Gun Club was a remarkable calculator. The solution of the most complicated problems of mathematical science was but sport to him. He laughed at difficulties, whether in the science of magnitudes, that is algebra, or in the science of numbers, that is arithmetic; and it was a treat to see him handle the symbols, the conventional signs which form the algebraic notation, whether letters of the alphabet, representing quantities or magnitudes, or lines coupled or crossed, which indicate the relation between the quantities and the operations to which they are submitted.

Ah! The co-efficients, the exponents, the radicals, the indices, and the other arrangements adopted in that language! How the signs leaped from his pen, or rather from the piece of chalk which wriggled at the end of his metal hook, for he preferred to work on a blackboard. There, on a surface of ten square yards—for nothing less would do for J. T. Maston—he reveled in all the ardor of his algebraical temperament. They were no miserable little figures that he employed in his calculations. No; the figures were fantastic, gigantic, traced with a furious hand. His 2's and 3's waltzed like shavings in a whirlwind; his 7's were like gibbets, and only wanted a corpse to complete them; his 8's were like spectacles; and his 6's and 9's had flourishes interminable!

And the letters with which he built up his formulæ! The a's and b's and c's he used for his quantities given or known; and the x's, y's and z's he used for the quantities sought or unknown, and especially his z's, which twisted in zigzags like lightning flashes! And what turns and twiggles there were in his π's his λ's, his ω's! Even a Euclid or an Archimedes would have been proud of them!

And as to his signs, in pure unblurred chalk, they were

simply marvellous. His + showed the addition was unmistakable. His —, though humbler, was quite a work of art. His × was as clear as a St. Andrew's cross. And as to his =, so rigorously equal were they, as to indicate without a chance of mistake, that J. T. Maston lived in a country where equality was no vain formula. His <, his >, and his ≷ were really grand! And as to his √, the root of a quantity or of a number, it was really a triumph, and when he completed the horizontal bar in this style



it seemed as if the indicatory vinculum would shoot clean off the blackboard and menace the world with inclusion within the maniacal equation.

But do not suppose that the mathematical intelligence of J. T. Maston was bounded by the horizon of elementary algebra. No! The differential calculus, the integral calculus, the calculus of variations were no strangers to him, and with unshaking hand he dashed down the famous sign of integration, the shape so terrible in its simplicity, the ∫ that speaks of an infinity of elements of the infinitely little.

And like it was his Σ which represents the sum of a finite number of finite elements; like it was his ∝ with which mathematicians indicate the variant; like it were all the mysterious symbols employed in this language so unintelligible to ordinary mortals. In short, this astonishing man was capable of mounting the mathematical ladder to the very topmost rung.

Such was J. T. Maston. No wonder his colleagues had every confidence in him when he undertook to solve the wildest abracadabrant calculations that occurred to their audacious brains! No wonder that the Gun Club had confided to him the problem regarding the hurling of the projectile from the Earth to the Moon! No wonder that Evangelina Scorbitt was intoxicated with his glory, and had conceived for him an admiration which perilously bordered on love!

But in the case under consideration, the solution of the problem regarding the conquest of the North Pole, J. T. Maston had no flight to take in the sublime regions of

analysis. To allow the concessionaries of the Arctic regions to make use of their new possessions, the secretary of the Gun Club had but a simple problem in mechanics to occupy his mind. It was a complicated problem, no doubt, requiring ingenious and possibly novel formulæ, but it could be done.

Yes! They could trust J. T. Maston, although the slightest slip might entail the loss of millions! But never since his baby head had toyed with the first notions of arithmetic had he made a mistake, never had he been the millionth of an inch out in a matter of measurement, and if he had made an error in the last of twenty places of decimals his gutta-percha cranium would have burst its fixings.

It was important to insist on the remarkable mathematical powers of J. T. Maston. We have done so! Now we have to show him at work, and to do that we must go back a few weeks.

About a month before the famous advertisement, J. T. Maston had been requested to work out the elements of the project of which he had suggested to his colleagues the marvelous consequences.

For many years he had lived at No. 179 Franklin Street, one of the quietest streets in Baltimore, far from the business quarter, for in commerce he took no interest; far from the noise of the crowd, for the mob he abhorred.

There he occupied a modest habitation known as Ballistic Cottage, living on the pension he drew as an old artillery officer, and on the salary paid him as the Gun Club secretary. He lived alone with one servant, Fire-Fire, a name worthy of an artilleryman's valet. This negro was a servant of the first-water, and he served his master as faithfully as he would have served a gun.

J. T. Maston was a confirmed bachelor, being of opinion that bachelorhood is the only state worth caring about in this sublunary sphere. He knew the Sclav proverb, that a woman draws more with one hair than four oxen in a plow; and he was on his guard.

If he was alone at Ballistic Cottage, it was because he wished to be alone. He had only to nod to change his solitude of one into a solitude of two, and help himself to half the fortune of a millionaire. There was no doubt

of it. Mrs. Scorbitt would only have been too happy; but J. T. Maston was not going to be too happy; and it seemed that these two people so admirably adapted to each other—in the widow's opinion—would never understand each other.

The cottage was a very quiet one. There was a ground-floor and a first-floor. The ground-floor had its veranda, its reception-room and dining-room, and the kitchen in a small annex in the garden. Above them was a bedroom in front, and a workroom facing the garden away from the noise, a *buen retiro* of the savant and the sage within whose walls were solved calculations that would have raised the envy of a Newton or a Laplace.

Different, indeed, was the home of Mrs. Scorbitt, in the fashionable quarter of New Park, with the balconies on its front covered with the fantastic sculpture of American architecture, Gothic and Renascence jumbled together; its enormous hall, its picture galleries, its double twisted staircase, its numerous domestics, its stables, its coach-houses, its gardens, its lawns, its trees, its fountains, and the tower which dominated its battlements from the summit of which fluttered in the breeze the blue and gold banner of the Scorbitts.

Three miles divided New Park from Ballistic Cottage. But a telephone wire united the two habitations, and at the ringing of the call between the mansion and the cottage conversation could be instantly established. If the talkers could not see each other, they could hear each other; and no one will be surprised to learn that Evangelina Scorbitt called J. T. Maston much oftener before his telephonic plate than J. T. Maston called Evangelina Scorbitt before hers. The mathematician would leave his work, not without some disgust, to receive a friendly "good morning," and he would reply by a growl along the wire, which he hoped would soften as it went, and then he would return to his problems.

It was on the 3rd of October, after a last and long conference, that J. T. Maston took leave of his colleagues to devote himself to his task. It was the most important investigation he had undertaken. He had to calculate the mechanical formulæ required for the advance on the Pole, and the economical working of the coal-beds thereof.

He estimated that it would take him rather more than a week to accomplish this mysterious task. It was a complicated and delicate inquiry, necessitating the resolution of a large number of equations dealing with mechanics, analytical geometry of the three dimensions, and spherical trigonometry.

To be free from trouble, it had been arranged that the secretary of the Gun Club should retire to his cottage, and be visited and disturbed by no one. This was a great trial for Mrs. Scorbitt, but she had to resign herself to it. She and President Barbicane, Captain Nicholl, the brisk Bilsby, Colonel Bloomsberry, and Tom Hunter with his wooden legs, had called on Maston in the afternoon to bid him farewell for a time.

"You will succeed, dear Maston," she said, as she rose to go.

"But be sure you don't make a mistake," said Barbicane, with a smile.

"A mistake! He!" exclaimed Mrs. Scorbitt, with horror at the thought.

With a grip of the hand from some, a sigh from one, wishes for success, and recommendations not to overwork himself from others, the mathematician saw his friends depart. The door of Ballistic Cottage was shut, and Fire-Fire received orders to open it to no one—not even to the President of the United States of America.

For the first two days of his seclusion J. T. Maston thought over the problem without touching the chalk. He read over certain works relative to the elements, the earth, its mass, its density, its volume, its form, its rotation on its axis, and translation around its orbit—elements which were to form the bases of his calculations.

These are the principal, which it is as well the reader should have before him. Form of the Earth: an ellipsoid of revolution, with a major diameter of 7926.6 miles, and a minor diameter of 7899.6 miles. The difference between the two, owing to the flattening of the spheroid at the Poles being 27 miles, or one two-hundred-and-ninety-third of its mean diameter.

Circumference of the Earth at the Equator: 24,899 miles, the meridional circumference being 24,856 miles.

Surface of the Earth: 197,000,000 square miles.

Volume of the Earth: 260,000,000,000 cubic miles.

Density of the Earth: five and a half times that of water, the mass being approximately 6,000,000,000,000,000,000,000 tons.

Duration of the Earth's journey around the Sun: 365 days and a quarter, constituting the solar year, or more exactly 365 days, 6 hours, 9 minutes, thus giving the spheroid an average velocity of 66,000 miles an hour.

Rate of the Earth's rotation at the Equator: 1037.4583 miles per hour.

The following were the units of length, force, time, and inclination which J. T. Maston required for his calculations; the mile, the ton, the second, and the angle at the center which cuts off in any circle an arc equal to the radius.

It was on the 5th of October, at five o'clock in the afternoon—it is important to know the precise time in a work of such celebrity—that J. T. Maston, after much reflecting, began to write. And, to begin with, he attacked the problem at its base—that is, by the number representing the circumference of the Earth, and one of its great circles, viz. the Equator.

The blackboard was placed in an angle of the room on an easel of polished oak, well in the light of one of the windows which opened on to the garden. Little sticks of chalk were placed on the shelf at the bottom of the board. A sponge to wipe out with was in the calculator's left hand. His right hand, or rather his hook, was reserved for writing down the figures of his working.

He began by describing the circumference of the terrestrial spheroid. At the Equator the curve of the globe was marked by a plain line representing the front part of the curve, and by a dotted line representing the back half of the curve. The axis was a perpendicular line cutting the Equator, and marked N.S.

On the left-hand top corner of the board he wrote the number that used to represent the earth's circumference in metrical measurement—

40,000,000.

He knew that this was an assumption admitted to be erroneous, but it afforded a good round integer to begin

with, and the subsequent rectification of his calculations by the inclusion of the missing meters was but child's-play to so transcendental a mathematician as J. T. Maston.

He was so pre-occupied that he had not noticed the state of the sky—which had changed considerably during the afternoon. For the last hour one of those great storms had been gathering which affect the organizations of all living things. Livid clouds like whitish wool flocks had accumulated on the gray expanse and hung heavily over the city. The roll of distant thunder was heard. One or two flashes had already rent the atmosphere where the electric tension was at its highest.

J. T. Maston, more and more absorbed, saw nothing, heard nothing.

Suddenly an electric bell troubled the silence of the room with its hurried tinkling.

"Good!" exclaimed the mathematician. "If interrupters can't get in by the door, they come through the wire! A fine invention for people who wish to be left alone! I'll see if I can't turn that current off while I am at work!" And stepping up to the telephone, he asked, "Who wants me?"

"I want a moment's talk with you," said a feminine voice.

"And who is speaking?"

"Have you not recognized my voice, dear Mr. Maston? It is Mrs. Scorbitt."

"Mrs. Scorbitt! She will not leave me a moment's peace." But the last words were prudently muttered above the instrument, so that the widow heard them not. And J. T. Maston, seeing that he must say something civil, replied, "Ah! It is you, Mrs. Scorbitt?"

"I, dear Mr. Maston!"

"And what does Mrs. Scorbitt want with me?"

"To tell you that there is a storm coming your way."

"Well, I cannot stop it—"

"No, but I wanted to ask if you had taken care to shut your window—"

Mrs. Scorbitt had hardly ended before a tremendous clap of thunder filled the air. It seemed as though a vast sheet of silk had been torn apart for an infinity of length. The lightning had flashed down over Ballistic Cottage,

and, conducted by the telephone wire, had invaded the mathematician's room with a brutality quite electric.

J. T. Maston, bending over the mouthpiece of the instrument, received the hardest voltaic knock that had ever found the mouth of a philosopher. The flash had run along his metal hook, and spun him around like a teetotum. The blackboard he struck with his back was hurled down in the corner. And the lightning disappeared out of the window.

Stunned for a moment—and it was a wonder it was no worse—J. T. Maston slowly rose, and rubbed the different parts of his body to make sure he was not hurt.

Then, having lost none of his coolness, as beseemed the ancient pointer of the Columbiad, he put his room in order, picked up his easel, hoisted up his blackboard, gathered up the fragments of chalk scattered on the carpet, and resumed his work, which had been so rudely interrupted.

But he noticed that by the fall of the blackboard the figures he had written on the right-hand top corner, which represented in meters the approximate equatorial circumference of the earth, had been partially erased. He stretched his hook up to re-write them when the bell sounded with a feverish tinkle.

"Again!" exclaimed J. T. Maston. And he went to the telephone.

"Who is there?" he asked.

"Mrs. Scorbitt."

"And what does Mrs. Scorbitt want?"

"Did that horrible flash of lightning strike Ballistic Cottage?"

"I have every reason to believe so."

"Good Heavens! The lightning—"

"Do not be uneasy, Mrs. Scorbitt."

"You are not hurt, dear Mr. Maston?"

"Not at all."

"You are sure you have not been touched?"

"I am only touched by your thoughtfulness for me," said the philosopher gallantly

"Good evening, dear Mr. Maston."

"Good evening, dear Mrs. Scorbitt."

And he returned to his blackboard.

"Confound that excellent woman," he said; "if she hadn't called me to the telephone I should not have run the chance of being struck by lightning."

And to insure being left in quiet, he judiciously put the telephone out of action.

Then he resumed his work. From the number on the board he gradually built up a definitive formula, and then noting it on the left, he cleared away the working by which he had arrived at it, and launched forth into an appalling series of figures and signs.

Eight days later the wonderful calculation was finished, and the secretary of the Gun Club triumphantly bore off to his colleagues the solution of the problem which they had awaited with a very natural impatience.

The practical means of arriving at the North Pole to work its coal-mines were mathematically established. Then the company was formed under the title of The North Polar Practical Association. Then the Arctic regions were purchased under the auctioneer's hammer. And then the shares were offered to the world.

CHAPTER VII

BARBICANE MAKES A SPEECH

On the 22nd of December a general meeting was called of the shareholders of the North Polar Practical Association, to take place at the rooms of the Gun Club in Union Square. And the square itself was hardly large enough to hold the crowd.

Usually the large hall of the club was decorated with weapons of all sorts appropriate to the noble profession of its members. It was quite an artillery museum. Even the furniture itself, the chairs and tables, and couches, was of the pattern of the murderous engines which had sent to a better world so many worthy people whose secret desire had been to die of old age.

On this occasion the furniture had been removed. This was not a warlike assembly; it was an industrial and pacific assembly over which Barbicane was to preside. The hall was full to suffocation, and the crowd of those who could not get in stretched half across Union Square.

The members of the Gun Club who had held the first shares in the company had secured places around the platform. Among them, even more triumphant than usual, were Colonel Bloomsberry, Tom Hunter with the wooden legs, and the brisk Bilsby. A comfortable arm-chair had been reserved for Mrs. Scorbitt, as was only right, considering that she was the chief proprietor of the Polar freehold; and there were a number of other lady shareholders belonging to all classes of the city, whose bright bonnets, and hats, and feathers, and ribbons, were a welcome relief to the black coats of the noisy men that crowded under the glazed cupola of the hall.

The immense majority of shareholders were not so much supporters as personal friends of the directors. But among the crowd were the representatives of the rival companies who had bid against Forster at the auction sale, and who now had taken shares in order to be qualified to vote and make mischief at the meetings. It can be easily imagined with what intense curiosity they awaited Barbicane's address, which would probably throw some light on the way in which the North Pole was to be reached. Perhaps there was a difficulty there even greater than working the mines? If any objections could be made we may be sure that Baldenak, Karkof, Jansen, and Harald were quite equal to making them. And the Major and his invaluable Todrin would lose no chance of driving Barbicane behind his last entrenchments.

It was eight o'clock. The hall, the side rooms, and the corridors of the Gun Club glowed with Edison lamps. Ever since the doors had been opened to the public there had been an incessant uproar, but as soon as the directors appeared all was silent.

At a table covered with a black cloth, on the platform, Barbicane, Nicholl, and J. T. Maston took up their positions in the fullest glare of the light. As they did so three cheers, punctuated by the needful "hips," broke forth, and were echoed in the adjacent streets. Solemnly J. T. Maston and Captain Nicholl sat down in all the plenitude of their celebrity. Then Barbicane, who had remained standing, put his right hand in his trousers pocket, his left thumb in his waistcoat pocket, and began to speak as follows:—

"Fellow shareholders: The directorate of the North Polar Practical Association have called this meeting in the rooms of the Gun Club, as they have something of importance to communicate to you.

"You have learned from the newspapers that the object of our company is the opening up of the coal-fields of the North Pole, the concession of which we have obtained. The estate acquired in public auction is the property of the company, and the capital, which was all subscribed by the 11th of December last, enables us to enter at once on an enterprise which will produce a rate of interest unknown up to now in any commercial or industrial operation whatever."

Here the first murmur of approval for a moment interrupted the orator.

"You are aware of how we came to discover that there were rich beds of coal, and also possibly of fossil ivory, in the circumpolar regions. The statements in the public press leave no doubt as to the existence of these coal strata.

"Now coal has become the source of all modern industry. To say nothing of the fuel used for heating purposes, or of its employment for the production of steam and electricity, I may direct your attention to its derivatives, the aniline colors, the perfumes, the picrates, salicylic acid, naphtol, phenol, antipyrin, benzin, naphthalin, pyrogallic acid, tannin, saccharin, tar, asphalt, pitch, lubricating oils, varnish, yellow prussiate of potass, cyanide, bitters, etc., etc."

And after this enumeration, which had been given with great rapidity, the orator paused like an exhausted runner to take a long breath. Then he continued, "It is indubitable that coal will in time be exhausted. Before five hundred years the mines in operation today—"

"Three hundred!" shouted one of the crowd.

"Two hundred!" roared another.

"Let us say a delay more or less restricted," said Barbicane, "and put ourselves in a position to see what new coal-fields then remain, supposing that the present fields are exhausted at the close of this century."

Here he paused to enable his audience to concentrate their attention. Then he continued, "Now, fellow share-

holders, follow me, and let us start for the North Pole."

And the audience rose as if to pack their baggage ready for shipboard.

An observation from Major Donellan put a sudden stop to this movement of enthusiasm.

"Before you start," said he, "will you kindly inform the meeting how you intend going? Are you going by sea?"

"Neither by sea, nor by land, nor by air!" said Barbicane sweetly.

And the assembly sat down, a prey to very pardonable curiosity.

"You are not without some knowledge," continued the orator, "of the attempts that have been made to reach that inaccessible point of the terrestrial spheroid. It is better, however, that I should remind you of a few of them. It will be to render due honor to the bold pioneers who have survived and those who have succumbed in these expeditions."

Unanimous approval from the entire audience irrespective of nationality.

"In 1845," resumed Barbicane, "Sir John Franklin with the *Erebus* and *Terror* set out to find the North-West Passage, and nothing more was heard of him.

"In 1854 the American, Kane, and his lieutenant, Morton, went in search of Franklin. They returned, but their ship, the *Advance* did not return.

"In 1859 Sir Leopold MacClintock discovered a document from which it appeared that no survivor remained of the *Erebus* and *Terror* expedition.

"In 1860 Hayes left Boston in the schooner *United States,* crossed the eighty-first parallel, and returned in 1862 without being able to advance farther, notwithstanding the heroic efforts of his companions.

"In 1869 Captains Koldewey and Hegeman, both Germans, left Bremerhaven in the *Hansa* and *Germania.* The *Hansa* was crushed in the ice a little below the seventy-first parallel, and the crew had to take to their boats to reach the coast of Greenland. The *Germania* was more fortunate, and returned to Bremerhaven, but she had not been able to get higher than the seventy-seventh parallel.

"In 1871 Captain Hall left New York in the steamer *Polaris.* Four months afterward, during the terrible

winter, he died. A year later the *Polaris,* caught in the floes after reaching the eighty-second parallel, was crushed by the ice. Eighteen of her men, under Lieutenant Tyson, took refuge on an ice-floe and reached the continent after long drifting about in the Arctic Ocean.

"In 1875 Sir George Nares left Portsmouth with the *Alert* and *Discovery.* It was in his memorable Arctic campaign that winter quarters were established between the eighty-second and eighty-third parallels, and that Captain Markham, in a dash to the northward, stopped within four hundred miles of the Pole, no one up to then having been so near.

"In 1879 our great citizen, Gordon Bennett—"

Here there were three cheers given for the proprietor of the *New York Herald.*

"Fitted out the *Jeannette,* which he confided to Captain De Long. The *Jeannette* left San Francisco with thirty-three men, passed through Behring Straits, was caught by the ice at Herald Island, and sank at Bennett Island, near the seventy-seventh parallel. The men had only one resource; to make southward with the boats or journey over the ice-fields. Misery decimated them. De Long died in October. Many others succumbed, and twelve only returned from the expedition.

"In 1881 Lieutenant Greely left St. John's, Newfoundland, in the steamer *Proteus,* to establish a station on Lady Franklin Bay, a little below the eighty-second degree. There he founded Fort Conger, whence he sent out expeditions west and north, one of which, under Lieutenant Lockwood and his companion, Brainard, in May, 1882, claims to have reached 83° 35′, being fifteen miles nearer than Markham's farthest. That is the nearest yet obtained. It is the Ultima Thule of circumpolar cartography."

Here there were loud cheers in honor of the American discoverers.

"But," said Barbicane, "the expedition ended in disaster. The *Proteus* sank. Eighty-four men were left in frightful misery. Doctor Pavy died. Greely was discovered by the *Thetis* in 1883 with only six companions, and one of these was Lieutenant Lockwood, who soon succumbed, adding another name to the sorrowful martyrology of Arctic exploration."

There was respectful silence while Barbicane paused.

Then in a thrilling voice he resumed:

"And so, in spite of devotion and courage unparalleled, the eighty-fourth degree has never been passed. And we may even assert that it never will be by means of ships or sledges. It is not given to man to face such dangers and support such extremes of temperature. It is by other means we must advance to the conquest of the Pole!"

From the subdued murmur of the audience it was evident that therein lay the interest of the communication. What was this secret?

"And how are you going to capture it?" asked the Canadian.

"Before ten minutes are up you will know, sir," replied Barbicane, "and in addressing the shareholders generally I say, Have confidence in us, for the promoters of the affair are the same men who embarked in the cylindro-conical—"

"The cylindro-conical," interrupted Todrin.

"Dared to venture to the moon."

"And have come back as we see!" added Todrin, not without signs of disapproval.

"Yes," continued Barbicane, "within the next ten minutes you will know what we propose."

A murmur of "Oh!" and "Eh!" and "Ah!" rose in answer to the reply.

It seemed as though the orator had said, "Within the ten minutes we shall be at the Pole!"

He continued, "And now, is it a continent at the Pole? Is it not a sea such as Sir George Nares called the Palæocrystic Sea, the sea of ancient ice? To that I say, We do not think so."

"That is not good enough," said Baldenak. "It is not a question of not thinking so but of being certain."

"Well! I reply to our exuberant interrupter that we are certain. It is solid ground, not a liquid basin, that the North Polar Practical Association has purchased. It is a plateau like the desert of Gobi in Central Asia, two or three miles above sea-level, as can be easily and logically proved from the observations made in the regions of which the polar domain is really a prolongation. Nordenskiold and other observers have all stated that Greenland

increases in height as it goes northward. A hundred miles from Disko its altitude is nearly 7000 feet. And if we consider the different products, animal or vegetable, found in the secular ice, such as the carcasses of mastodons, the trunks of conifers, you can see that the continent was once a fertile one, inhabited certainly by animals, and probably by men. There lie buried the thick forests of pre-historic times, which have formed the coal-fields we propose to develop. Yes! It is a continent around the Pole, a virgin continent untrodden by human foot."

Great applause.

When the echoes of the applause had rolled away, the strident voice of the Canadian was heard, "Seven minutes out of the ten have gone, and we have not yet reached the Pole!"

"We will be there in three minutes," placidly remarked Barbicane.

He continued, "But if it is a continent, and the continent is elevated as we have reason to believe, it is obstructed by eternal ice, covered with icebergs and ice-fields, and under such circumstances its development would be difficult—"

"Impossible!" said Harald.

"Impossible, I am aware," said Barbicane. "And it is to conquer this impossibility that our efforts are directed. We have no need of ships or sledges to reach the Pole, but thanks to our arrangements the fusion of the ice, ancient or modern, will take place like enchantment!"

He paused. There was absolute silence.

"Gentlemen," he continued, "Archimedes demanded but a fulcrum to lift the world! Well, we have found a fulcrum! A lever was what the great Syracusan geometer required, and a lever we possess! We are in a position to displace the Pole—"

"Displace the Pole!" exclaimed Baldenak.

"Bring it to Baltimore!" said Professor Harald.

Evidently Barbicane did not wish to be more precise, for he continued, "As to this fulcrum—"

"Don't tell! Don't tell!" shouted one of the audience.

"As to this lever—"

"Keep it secret! Keep it secret!" shouted the spectators.

"We will keep it secret!" said Barbicane.

Baldenak and Co. protested in vain. The orator continued, "As to the results of this mechanical operation—an operation unprecedented in industrial annals—which we have undertaken and will bring to a successful issue thanks to your capital, I will say a few words."

"Listen! listen!" shouted the crowd.

"The first idea of our enterprise occurred to one of the most learned, devoted, and illustrious of our colleagues. To him also belongs the glory of having made the calculations which rendered the theory practicable, for if the development of the Polar mines is child's play, the displacement of the Pole is a problem which higher mechanics can alone deal with. That is why we addressed ourselves to our worthy secretary, J. T. Maston!"

"Hurrah! Hip! hip! hip! hurrah! for J. T. Maston!" shouted the whole assembly, electrified by the presence among them of that extraordinary man.

Ah! How much was Mrs. Scorbitt moved at the acclamations which resounded around the celebrated calculator!

He, with great modesty, bowed his head to the right; then to the left, and then saluted in front with his metal hook.

"Already," said Barbicane, "when the great meeting which celebrated the arrival in America of the Frenchman Michel Ardan, a few months before our departure for the Moon—"

The American spoke as coolly of the voyage to the Moon as of a railway journey to New York.

"J. T. Maston had exclaimed, 'Let us invent machines, let us find a fulcrum, and we will shift the axis of the Earth!' Many of you heard him, and will remember it. Well, the machines are invented, the fulcrum is found, and it is to the righting of the Earth's axis that our efforts will be directed."

"What!" exclaimed Donellan. "You will put the Earth's axis upright?"

"Yes, sir," said Barbicane; "or rather we can make a new axis on which the diurnal rotation formerly—"

"Modify the diurnal rotation!" exclaimed Karkof.

"Absolutely! and without touching its duration. The

operation will bring the Pole to about the sixty-seventh parallel, and under such circumstances the Earth will behave like Jupiter, whose axis is nearly perpendicular to the plane of his orbit. This displacement of 23° 28′ will suffice to obtain for our Polar property sufficient warmth to melt the ice accumulated for thousands of years."

The audience looked at him in a state of breathlessness. No one dared to interrupt or even to applaud him. All were overwhelmed with the idea, which was so ingenious and so simple; to change the axis on which the globe turns!

The representatives of the rival syndicates were astounded, annihilated, and remained without a word to say for themselves.

But the applause broke out when Barbicane concluded with sublime simplicity, "Thus it is the Sun himself who will melt the icebergs and ice-floes, and render it easy to obtain access to the Pole!"

"And so," said Donellan, "if man cannot get to the Pole, the Pole must come to man?"

"Just so!" said Barbicane.

CHAPTER VIII

LIKE JUPITER

YES! Like Jupiter.

At the time of that memorable meeting in honor of Michel Ardan—so appropriately mentioned by the orator—if J. T. Maston had excitedly exclaimed, "Let us right the Earth's axis," it was because the daring and fantastical Frenchman, one of the heroes of the Moon Voyage, had chanted his dithyrambic hymn in honor of the most important planets of our solar system. In his superb panegyric he had celebrated the special advantages of the giant planet, as we briefly reported at the time.

The problem solved by the calculator of the Gun Club was the substitution of a new axis of rotation for the old one on which the Earth had turned ever since in popular phrase, "the world was a world." This new axis of rotation would be perpendicular to the plane of its orbit; and under such conditions the climatal situation of the old

Pole would be much the same as that of Trondjhem, in Norway, in spring time. The palæocrystic armor would thus naturally melt under the rays of the Sun; and at the same time climate would be distributed over the Earth as the climates are distributed in Jupiter.

The inclination of our planet's axis, or in other terms, the angle which its axis of rotation makes with the plane of its ecliptic is 66° 32′. A few degrees would thus bring the axis perpendicular to the plane of the orbit it describes around the Sun.

But—it is important to remark—the effort that the North Polar Practical Association was about to make would not, strictly speaking, right the Earth's axis. Mechanically, no force, however considerable, could accomplish that. The Earth is not like a chicken on a spit, that we can take it in our hand and shift it as we will. But the making of a new axis was possible—it may be said easy—if the engineers only had the fulcrum dreamed of by Archimedes and the lever imagined by J. T. Maston.

But as it had been decided to keep the invention a secret until further orders, all that could be done was to study the consequences. And to begin with, the journals and reviews of all sorts appealing to the learned and the ignorant devoted themselves to considering how Jupiter was affected by the approximate perpendicularity of his axis to the plane of his orbit.

Jupiter, like Mercury, Venus, the Earth, Mars, Saturn, Uranus, and Neptune, forms part of the solar system, and sweeps around at nearly five hundred million miles from the central fire; and his volume is about fourteen times that of the Earth.

If there be such a thing as Jovian life, that is to say, if there are any inhabitants on Jupiter, the following are the advantages they obtain by living on the great planet—advantages so poetically brought into relief at the memorable meeting above alluded to.

In the first place, during the diurnal rotation of Jupiter, which occupies nine hours, fifty-five minutes, the days are always equal to the nights in all latitudes; that is to say, the Jovian day is four hours, fifty-seven minutes long, and the Jovian night lasts also four hours and fifty-seven minutes.

"There," said the admirers of Jovian existence, "you have something suited to people of regular habits. They will be delighted to submit to such regularity."

That is what would happen to the Earth if Barbicane did what he promised, only as the new axis would make no difference in the time of rotation, twenty-four hours would still separate the successive noons, and our spheroid would be blessed with nights and days each twelve hours long, and we would live in a perpetual equinox.

"But the climatal phenomena would be much more curious; and no less interesting," said the enthusiasts, "would be the absence of the seasons."

Owing to the inclination of the axis to the plane of the orbit, we have the annual changes known as spring, summer, autumn, and winter. The Jovians could know nothing of these things, and the Terrestrians would know them no more. The moment the new axis became perpendicular to the ecliptic there would be neither frigid zones nor torrid zones, but the whole Earth would rejoice in a temperate climate.

Why was this?

What is the Torrid zone? It is that part of the Earth comprised between the Tropics of Cancer and Capricorn. Every place within this zone has the Sun in the zenith twice a year.

What are the Temperate zones? The part comprised between the Tropics and the Polar circles; between 23° 28′ and 66° 32′ of latitude, and in which the Sun never rises to the zenith, but is above the horizon on every day in the year.

What are the Frigid zones? That part of the circumpolar regions in which the Sun does not rise above the horizon on every day in the year; while at the Pole itself he does not rise for six months at a time.

The height of the Sun above the horizon is the cause of the excessive heat of the Torrid zone, the moderate heat of the Temperate zone, and the excessive cold within the Polar circles.

When the axis became perpendicular these things would be different. The Sun would remain on the plane of the Equator. All the year around he would pursue his imperturbable twelve-hour course, and rise to a distance from the

zenith according to the latitude of the place. In countries of twenty degrees of latitude he would rise seventy degrees above the horizon; in countries of forty-nine degrees of latitude he would rise forty-one; in places of eighty-four degrees he would rise six, and of ninety degrees (the Pole), he would just peep half his diameter above the horizon. The days would be perfectly regular, and the Sun would rise at the same time, and also at the same point on the horizon, throughout the year.

"Look at the advantages!" said the friends of Barbicane. "Every man, according to his temperament, can choose his own climate, which will be invariable!"

Those modern Titans, the North Polar Practical Association, were going to effect a complete change in the state of things which had existed ever since the spheroid had been launched on its orbit to become the Earth as we know it.

The astronomer might lose a few of the familiar constellations; the poet might lose the long winter nights and the long summer days that figure so frequently in modern verse; but what of that when we think of the advantages that would be enjoyed by the majority of the human race?

As the newspapers in the Barbicane interest pointed out, the products of the Earth being reduced to regularity, the farmer could always plant and sow in the most favorable temperature.

"Be it so!" said the opposition. "But are we to have no rains, or hail, or storms, or waterspouts, or other odds and ends that make matters pleasant for the depressed agriculturist?"

"You may have them, of course," said the Barbicanians, "but they will probably be rarer, owing to the regularity of the climate having its effect on the troubles of the atmosphere! Yes, humanity will profit greatly by the new state of things. It will be quite a transformation of the terrestrial globe. Barbicane & Co. will have conferred much good on the present and future generations by destroying the inequality of the days and nights and the irritating diversity of the seasons!"

And the *New York Sun* of the 27th of December concluded one of its most eloquent articles:—

"Honor to Impey Barbicane and his colleagues! Not only will they have made the Earth more hygienically habitable, but they will have made it more productive; for then we can sow as soon as we have harvested, for no time will be wasted over the winter. Not only will our coal supplies be increased by the new fields, which will insure a supply for many long years, but the climatal conditions will be altered to our great advantage! Honor, then, to Barbicane & Co., who will take the first rank among the benefactors of mankind!"

CHAPTER IX
SULPHURIC ALCIDE

SUCH were the advantages promised by Barbicane's changing the axis of rotation—a change, however, which would only slightly affect the movement of our spheroid around the Sun. The Earth would continue to describe its orbit through space, and the conditions of the solar year would remain the same.

When the consequences of the change of axis were brought to the knowledge of the world, they caused extraordinary excitement. At first this problem of the higher mechanics received an enthusiastic welcome. The idea of having seasons of constant equality, and, according to the latitude, "to suit consumers," was very attractive. The crowd reveled in the thought that they could enjoy the perpetual spring which the bard of Telemachus accorded to the Island of Calypso, and that they could have the spring either fresh or mild. Where the new axis was to be seemed to be the secret of Barbicane, Nicholl, and J. T. Maston, which they were in no hurry to present to the public. Would they reveal it in advance, or would it be known after the experiment? It would be as well to say so, perhaps, as opinion began to show signs of anxiety in the matter.

One observation occurred naturally to the mind, and was at once commented on in the newspapers. By what mechanical means was the change to be produced, which evidently required the employment of an enormous force?

The *Forum*, an important New York review, very justly

remarked: "If the Earth did not turn on its axis, it is probable that a relatively feeble shock would suffice to give a movement of rotation around an axis arbitrarily chosen; but the Earth is like an enormous gyroscope moving at high velocity, and it is a natural law that such an apparatus has a tendency to turn around the same axis, as Foucault demonstrated in his well-known experiments. It will therefore be very difficult, if not impossible, to shift it."

But after asking what would be the effort required by the engineers of the North Polar Practical Association, it was at least as interesting to know if the effort was to be suddenly or insensibly applied. And if it was to be a sudden effort, would not the proceedings of Messrs. Barbicane & Co. produce some rather alarming catastrophes on the face of the Earth?

Here was something to occupy the brains of the wise and foolish. A shock is a shock, and it is never agreeable to receive the blow or the counter-blow. There was a likelihood that the promoters of the enterprise had been so busy with the advantages the world was to possess that they had overlooked the destruction the operation would entail. And with considerable cleverness the Major and his allies made the most of this, and began to agitate public opinion against the president of the Gun Club.

Although France had taken no part in the syndicating, and officially treated the matter with disdain, yet there was in that country an individual who conceived the idea of setting out for Baltimore, to follow, for his own private satisfaction, the different phases of the enterprise.

He was a mining engineer of about five and thirty years of age. He had been the first on the list when admitted to the Polytechnic School, and he had been the first on the list when he left it, so that he must have been a mathematician of the first order, and probably superior to J. T. Maston, who, though he was a long way above the average, was only a calculator after all—that is to say, what Leverrier was compared to Newton or Laplace.

This engineer was a man of brains, and—though he was none the worse for that—somewhat of a humorist, and an original. In conversation with his intimates, even when he talked science, his language was more that of the slang

of the streets than of the academical formulæ he employed when he wrote. He was a wonderful worker, being accustomed to sit for ten hours at a stretch before his table, writing pages on pages of algebra with as much ease as he would have written a letter.

This singular man was called Pierdeux (Alcide), and in his way of condensing it—as is the custom of his comrades—he generally signed himself *P*ierd, or even *P* I, without even dotting the i. He was so perfervid in his discussions that he had been named Sulphuric Alcide. Not only was he big, but he was tall. His friends affirmed that his height was exactly the five millionth part of a quarter of the meridian, and they were not far out. Although his head was rather too small for his powerful bust and shoulders, yet he held it well, and piercing were the eyes that looked through his *pince-nez*. He was chiefly distinguished by one of those physiognomies in which gaiety and gravity intermingle, and his hair had been prematurely thinned by the abuse of algebraic signs under the light of the gas-lamps in the study.

He was one of the best fellows whose memory lingers at the school. Although his character was independent enough, he was always loyal to the requirements of Code X, which is law among the Polytechnicians in all that concerns comradeship and respect for the uniform. He was equally appreciated under the trees of the court of "Acas," so named because there are no acacias, as in the "casers," the dormitories, in which the arrangements of his box, and the order that reigned in his "coffin," denoted an absolutely methodical mind.

That the head of Alcide Pierdeux was a little too small for his body we admit, but that it was filled to the meninges will be believed. Above all things, he was a mathematician like all his comrades are, or have been, but he only used his mathematics in application to experimental science, whose chief attraction to him was that it had much to do with industry. Herein he recognized the inferior side of his nature. No one is perfect. His strong point was the study of those sciences which, notwithstanding their immense progress, have, and always will have, secrets for their followers.

Alcide was still a bachelor. He was still "equal to

one," as he phrased it, although he had no objection to become "the half of two." His friends had had ideas of marrying him to a very charming girl at Martigues. But, unfortunately, she had a father, who responded to the first overtures in the following "martigalade": "No, your Alcide is too clever! He talks to my poor girl in a way that is unintelligible to her!"

And hence Alcide resolved to take a year's holiday, and thought he could not employ his time better than in following the North Polar Practical Association in its peculiar undertaking.

As soon as he arrived at Baltimore he began to think over the matter seriously. That the Earth would become Jovian by the change of its axis mattered very little to him. But by what means it was to be brought about excited his curiosity, and not without reason.

In his picturesque language he said to himself, "Evidently Barbicane is going to give our ball a terrible knock; but what sort of a knock? Everything depends on that! I suppose he is going to play for 'side,' as if with a cue at a billiard-ball; but if he hits us 'square' he may jolt us out of our orbit, and then the years will dance to a pretty tune. They are going to shift the old axis for a new one, probably above it, but I do not see where they are to get their taking-off place from, or how they are to manage the knock. If there was no rotation, a mere flip would suffice, but they can't put down that diurnal spin. That is the *canisdentum.*"

He meant "the rub," but that was his way of expressing himself.

"Whatever they do," he continued, "there will be no end of a row before it is over."

Try all he could, the engineer could not discover Barbicane's plan, which for one reason was much to be regretted, as if it had been known to him he would at once have made the calculations he needed.

But all at present was a mystery. And so it happened that on the 29th of December Alcide Pierdeux, "Ingénieur au Corps National des Mines de France," was hurrying with lengthy strides through the crowded streets of Baltimore.

CHAPTER X

A CHANGE IN PUBLIC OPINION

A MONTH had elapsed since the meeting in the rooms of the Gun Club, and a change had taken place in public opinion.

The advantages of altering the axis of rotation were being forgotten; and the disadvantages were being enlarged upon. It was impossible that a catastrophe could be avoided, for any change must necessarily be occasioned by a violent shock. What the catastrophe would be no one could say. Was this amelioration of climate desirable? Who would gain by it except the Eskimos, Laps, and Samoyeds, who had nothing to lose?

The Major and his allies were indefatigable in their prophecies of evil.

"It is evident," said Karkof, "that the projectors will do all they can to protect the United States from the consequences of the shock."

"But can they?" asked Harald. "When you shake a tree all the branches shake."

"And," said the Dutchman, "when you are hit in the stomach does not your whole body shake?"

"That is what that famous clause meant!" said Todrin. "Here are the geographical and meteorological modifications!"

"Yes," said Baldenak. "But suppose the change of axis throws the seas out of their existing basins?"

"And if the ocean level is lowered at different points," said Jansen, "some people may find themselves so high up in the world that communication with them will be impossible!"

"If they go up too high they will not be able to breathe!" said Harald.

"Would you like to see Baltimore as high as Mont Blanc?" asked Donellan.

This modification of the axis was evidently a public danger. A change of 23° 28′ would produce a considerable displacement in the seas, owing to the flattening at the Poles. The Earth was thus threatened with similar

disasters to those that, it is believed, have recently occurred in Mars. There entire continents, among others Libya and Schiaparelli, have been submerged, as shown by the faint blue replacing the faint red. Lake Moeris has disappeared. North and south there have been changes, and the oceans have withdrawn from many localities they formerly occupied. If a few charitable souls have been much affected at the "floods in Mars"—almost as much as to open subscriptions for the sufferers—what would they do for the floods on the Earth?

Protests came in by every post. The United States Government was urged to interfere.

"Look at these Yankees," said one. "They want to hang the globe on another axletree! As if the old one, after all these centuries, had worn out! But is it not as sound as it was at the beginning?"

And there was Sulphuric Alcide at work trying to find out the nature and direction of the shock that J. T. Maston had arranged. Once master of the secret, he would very soon know what parts of the Earth were in danger.

It was not likely that the United States would suffer. Barbicane & Co. were quite Yankees enough to take care of their own country. Evidently the new Continent between the Arctic Sea and the Gulf of Mexico had nothing to fear. It was even possible that North America would gain a considerable accession of territory.

"That may be," said the nervous people who only saw the perilous side of things. "But are you sure? Supposing J. T. Maston has made a mistake? Supposing Barbicane makes a mistake when he puts Maston's theory in practice? Such a thing can happen to the cleverest artillerists! They do not always score a bull's-eye!"

These fears were sedulously worked upon by the Major and the opposition. Todrin published a number of articles in a leading Canadian newspaper. Harald rushed into print in a Swedish journal. Colonel Boris Karkof tried his hand in a Russian one. The Americans began to take sides. The *New York Tribune* and the *Boston Journal* took up their parable against Barbicane. In vain the North Polar Practical Association tried to stem the rising tide. In vain Mrs. Scorbitt paid ten dollars a line for

serious articles, humorous articles, and smart, scathing paragraphs treating the dangers as chimerical. In vain the enthusiastic widow endeavored to show that if ever hypothesis was unjustifiable, it was that which assumed that J. T. Maston was capable of an error!

Neither Barbicane nor his co-directors took the trouble to say anything. They let the talk go on without making any change in their habits. They seemed to be thoroughly absorbed in the immense preparations necessitated by their undertaking. The revulsion of public opinion seemed to concern them not in the least.

But in spite of all Mrs. Scorbitt could do, it soon came about that Impey Barbicane, Captain Nicholl, and J. T. Maston began to be looked upon as dangers to society. So high grew the clamor that the Federal Government had to interfere, and call upon them to declare their intentions. What were their means of action? How did they intend to substitute one axis for another? What would be the consequences of the substitution? What parts of the globe would the substitution endanger?

The excitement raging in every State in the Union allowed of no hesitation on the part of the Washington Government. A Commission of Inquiry, composed of engineers, mathematicians, hydrographers, and geographers, to the number of fifty, presided over by the celebrated John Prestice, was appointed on the 19th of February, with full powers to investigate the affair, and put a stop to it if necessary.

Impey Barbicane was requested to attend before the Commission. Barbicane did not come.

The police went to look for him at his residence, 95 Cleveland Street, Baltimore. Barbicane was there no longer.

Where was he? They did not know.

When had he gone away? Five weeks ago, on the 11th of January, he had left Maryland in company with Captain Nicholl.

Where had they gone? No one could say.

Evidently the two members of the Gun Club were on their way to the mysterious region where preparations would begin under their direction.

But where could that be?

It was important to know, if the scheme of these dangerous projectors was to be nipped in the bud.

The effect of this departure of Barbicane and Nicholl was immense. The popular wrath rose like the rising of the equinoctial tide against the North Polar Practical Association.

But there was one man who ought to know what had become of Barbicane and his colleague. There was one who ought to be able to reply, and instantly, J. T. Maston!

J. T. Maston was requested to appear before the Commission. He did not go!

Had he then left Baltimore? Had he gone with his colleagues, to help in the work of which the world awaited the results with such very natural alarm?

No! J. T. Maston was still to be found at Ballistic Cottage. He was still incessantly at work, but now on other calculations, which he only left to spend an occasional evening with Mrs. Scorbitt at New Park.

A policeman was sent with an order from the president of the Commission. The policeman reached the cottage, knocked at the door, entered the hall, and had a warm reception from Fire-Fire and a cool one from J. T. Maston.

However, the secretary of the Gun Club thought it as well to go quietly, and he appeared before the Commission complaining bitterly of having been interrupted in his occupation.

The first question put to him was, "Do you know the whereabouts of Impey Barbicane and Captain Nicholl?"

"I do," said J. T. Maston, "but I am not authorized to tell you."

Second question: "Are these two men occupied in the preparations for their intended modification of the terrestrial axis?"

"That," said J. T. Maston, "is part of the secret with which I am entrusted, and I refuse to say."

Would he submit his calculations to the Commission, that they might judge if the project of the Association could be accomplished?

"No, certainly not!" said J. T. Maston. "It is my right as a free American citizen to keep from anybody the result of my work!"

"But if that is your right, Mr. Maston," said President Prestice solemnly, as if he spoke in the name of the entire world, "it may be your duty to speak in face of the anxiety that exists."

J. T. Maston did not think it was his duty. He had only one duty—to keep silent; and he would keep silent.

In spite of their persistence, their supplications, their threats, the members of the Commission of Inquiry could get nothing out of the man with the iron hook. Never would they have believed that so much obstinacy lurked within a gutta-percha cranium! J. T. Maston left as he had arrived, and that he was congratulated on his valiant defense by Mrs. Scorbitt we need hardly say.

When the result of J. T. Maston's appearance was made known, public opinion took a form that was really serious for his safety. The pressure on the Government became so great that Secretary John S. Wright had to obtain permission from the President to act *manu militari*.

On the evening of the 13th of March, J. T. Maston was in his workroom at Ballistic Cottage, absorbed in his algebra, when the bell of the telephone tinkled nervously.

"Hallo, there! Hallo, there!" murmured the instrument in a way that showed great anxiety.

"Who's there?" asked J. T. Maston.

"Mrs. Scorbitt."

"What is it?"

"Be on your guard! I have just heard that this very night—"

The sentence had not been finished when the door of Ballistic Cottage was burst open by a push from several shoulders, and up the staircase came an extraordinary tumult. There was a voice protesting; then other voices silencing it; then a bump as of a fallen body—bump, bump—it was the negro, Fire-Fire, rolling downstairs after an unavailing defense of his master's home—bump, bump; the door of the workroom flew open; policemen rushed in; the excitable Maston seized a revolver; instantly he was disarmed; a policeman laid his hand on the papers on the desk; Maston slipped free and dashed at a note-book; the police were after him; before they could reach him he had torn out the last leaf, clapped it to his mouth, and gulped it down as if it had been a pill!

"Now!" said he in the tone of a Leonidas at Thermopylæ, "*Now* you can do your duty."

An hour afterward he was in the jail at Baltimore.

And that was probably the best thing that could have happened to him, for the populace were in such a state of excitement that the police might have found themselves powerless to protect him.

CHAPTER XI

THE CONTENTS OF THE NOTE-BOOK

THE book seized by the Baltimore police contained thirty pages, sprinkled with formulæ, multiplications, equations, and finally the general results of J. T. Maston's calculation. It was a work of the higher mechanics, appreciable only by mathematicians. One of the equations was the—

$$V^2 - V^2 = 2gr^2\left(\frac{1}{r} - \frac{1}{r_0}\right)$$

of which we heard in the Moon Voyage.

The "general reader" could make neither head nor tail of Maston's performances; but they could understand the results as told to the newspapers a few days later.

There was nothing wrong with J. T. Maston's working, the Commission reported. The calculations had been made with such precision that the Commission had no doubt as to their accuracy and consequences. If the operation was effected, the terrestrial axis would be undoubtedly changed, and then the catastrophes foreseen would be accomplished in all their plentitude.

"The object," said the official communication to the newspapers, "of the directorate of the North Polar Practical Association is the substitution of a new axis of rotation for the old one; and it is proposed to attain this object by means of the recoil of an apparatus fixed in some agreed point of the Earth's circumference. If the core of this apparatus is firmly fixed in the ground, there can be no doubt but that it would communicate its recoil to the mass of our planet.

"The apparatus adopted by the Association is a monster cannon, which would have no effect if discharged vertically.

To produce the maximum effect it must be aimed horizontally toward the north or south, and it is this latter direction which has been decided on by the Association. In this way the recoil will produce a shock toward the north of the nature of that given to a billiard-ball when struck on the side."

Exactly as Alcide had foreseen!

"As soon as the explosion takes place, the center of the Earth will be displaced in a direction parallel to that of the impetus, and a change will ensue in the plane of the orbit, and consequently in the length of the year; but this will be so slight as to be of no appreciable amount. At the same time the Earth would take a movement of rotation around an axis, supposing that no rotation existed previous to the shock. But as the rotation in the line of the Poles already exists, it will combine with the accessory rotation produced by the recoil, and result in a new axis. If the gun is fired at the moment when the Equator and the Ecliptic are in intersection, and if the recoil is enough to displace the Pole 23° 28′, then the new axis will become perpendicular to the plane of the orbit.

"The consequences of this perpendicularity were clearly stated by Impey Barbicane at the meeting on the 22nd of December.

"Given the mass of the Earth and the amount of movement it possesses, can a gun be produced having a recoil sufficient to produce such a displacement of the Pole as 23° 28′?

"Undoubtedly; if a gun, or series of guns, be constructed in accordance with the laws of mechanics, or if the inventors possess an explosive of the necessary power. Such an explosive they unfortunately possess. It was discovered by Captain Nicholl. Its name is meli-melonite, but all that is known of it is that it is a mixture of organic substances with nitric acid. A certain number of monatomic radicles are substituted for the same number of atoms of hydrogen, and a powder is obtained, which, like fulmi-cotton, is formed by combination, not by mechanical mixture of the principal comburents and combustibles.

"Whatever this explosive may be, the force it possesses is sufficient to carry a projectile weighing 180,000 tons beyond the terrestrial attraction, and it is hoped by the

Association that the recoil will have the effect of displacing the Pole, and forming a new axis perpendicular to the plane of the ecliptic. From which would result the catastrophes which have alarmed the inhabitants of the Earth.

"There is a chance that humanity may yet escape the consequences of an operation which would bring about such regrettable geographical and meteorological changes in the surface of the globe. Is it possible to construct a cannon of the dimensions required? We are of opinion that it is very doubtful if it can be done.

"It is well known that the two chief directors of the North Polar Practical Association have left Baltimore and America, probably for the purpose of attempting the manufacture of this cannon in some distant part of the world.

"Where they have gone to is unknown, and consequently it is impossible to secure the malefactors who would upset the world under pretense of opening up new coal-fields.

"Evidently the place was indicated on the last page of the note-book captured by the police from J. T. Maston. But this last page had disappeared, having been swallowed by the said J. T. Maston, now in prison at Baltimore.

"Such is the position. If Impey Barbicane can make his cannon and his projectile, he will change the earth's axis, and within the next six months the earth will be subjected to his reckless assault.

"A date has been chosen for the discharge of the projectile, the date on which the shock would have its maximum of effect on the terrestrial spheroid.

"This date is the 22nd of September, twelve hours after the passage of the Sun across the meridian of the place x.

"This place it is impossible from the calculations to discover.

"There is nothing in J. T. Maston's note-book to show the position of the new axis.

"It is therefore impossible to state what territories or seas will be affected by the attempt.

"The difference of level will be considerable. After the shock the surface of the sea will take the form of an ellipsoid of revolution, and the level will change nearly all over the globe.

"In fact the intersection of the level of the old sea with

the level of the new sea, of two equal surfaces of revolution with the axes intersecting, will be of two curved planes, and the maxima of elevation or abasement will exceed 25,000 feet.

"It is worthy of remark that the ancient Pole will be immersed under more than 9000 feet of water, so that the district acquired by the North Polar Practical Association will be flooded unless there exists at the Pole a plateau of more than that number of feet of elevation.

"Where the maximum of alteration of land will take place is unknown. There is in the equation an unknown quantity, which no known formula can value. This unknown is the position of x, where the shock is to be applied. This x is the secret of the promoters of this deplorable affair.

"In conclusion, it is desirable to point out that all the inhabitants of the Earth are interested in unraveling the secret, for all are menaced by the proceedings of the Association.

"Notice is therefore given to the inhabitants of all parts of the world to keep a strict watch over all operations regarding the founding of cannons, or the fabrication of powders or projectiles taking place on their territories, and to report the appearance of any stranger connected therewith to the Commission of Inquiry at Baltimore, U. S. A.

"It is urgently necessary that the information should reach the Commission before the 22nd of September next, the date on which the established order of the terrestrial system is so seriously menaced."

CHAPTER XII

HEROIC SILENCE

It was a cannon that hurled the projectile up to the Moon; it was to be a cannon that was to change the terrestrial axis! The cannon! Always the cannon! Barbicane and Co. evidently suffered from chronic attacks of aggravated "cannonism"! Was a cannon the *ultima ratio* of the world? Was it to be the brutal sovereign of the universe? The canon rules theology, was the cannon to give the law to commerce and cosmology?

A cannon was the engine Barbicane & Co. were to bring into action. They had not devoted their lives to ballistics for nothing. After the Columbiad of Tampa Town there was to come the monster cannon of—of—the place *x!* And already there were people who could hear the sonorous command:

"No. 1! Aim at the Moon! Fire!"

"No. 2! Change the Earth's axis! Fire!"

And then for the "general upset" predicted by Sulphuric Alcide!

The publication of the report of the Commission produced an effect of which it is impossible even to give an idea. There was nothing in it of a soothing tendency, it must be admitted. By J. T. Maston's calculations, the problem had evidently been solved. The operation to be attempted by Barbicane & Co. would, it was only too clear, introduce a most regrettable modification in the diurnal movement. A new axis would be substituted for the old. And we know what would be the consequences of that substitution.

The enterprise of Barbicane & Co. was thus judged, cursed, and demitted to general reprobation. Barbicane & Co. were dangers to society. If they retained a few partisans in the United States, they were few indeed.

From the point of view of their own personal safety, Impey Barbicane and Captain Nicholl had certainly done wisely to clear out. They would assuredly have come to grief if they had not done so. It was not with impunity that they could menace fourteen hundred millions of people, upset their habits and customs, and disturb their very existence by provoking a general catastrophe.

But how had these two men managed to disappear without leaving a trace? How could they have gotten away unperceived with the men and material necessary for their project? Hundreds of wagons, if they went by railway, and hundreds of ships, if they went by sea, would be required for the transport of the metal, the fuel, and the meli-melonite. It was quite incomprehensible how the departure could have taken place incognito. But it had taken place nevertheless.

Inquiries were made, but nothing was discovered as to any order being sent to any of the metallurgical or chem-

ical works of the world. It was inexplicable! But the explanation would come—some day!

Barbicane and Nicholl having mysteriously disappeared, were beyond immediate danger. But J. T. Maston! He was under lock and key; but were not public reprisals to be feared? Bah! He did not trouble himself about that in the least! Admirably obstinate was the calculator! He was of iron—like his fore-arm! At nothing did he quail!

From the depths of his cell in the jail of Baltimore the secretary of the Gun Club became more and more absorbed in the distant contemplation of the colleagues he had not accompanied. In his mind's eye he could see Barbicane and Nicholl preparing their gigantic enterprise in that unknown region where no one could interfere with them. He saw them making the cannon, mixing the meli-melonite, casting the projectile which the Sun would soon count among its minor asteroids! That new star which was to bear the name of Scorbitta, as a delicate compliment to the millionaire of New Park! J. T. Maston began to count the days that would elapse before the word to fire was given.

It was the month of April. In two months and a half the Sun would halt at the solstice on the Tropic of Cancer and retrograde toward the Tropic of Capricorn. Three months later he would cross the Equator at the autumnal equinox. And with that would finish the seasons that for millions of ages had alternated with such regularity in every terrestrial year. For the last time the spheroid would submit to the inequality of its days and nights. For the future the number of hours between sunrise and sunset would be equal all over the globe.

In truth it was a magnificent work! J. T. Maston forgot all about the Polar coal-field in contemplating the cosmographical consequences of his labors. The principal object of the Association had been forgotten in the transformations the face of the earth would undergo—notwithstanding that the earth did not care about these magnificent transformations.

J. T. Maston, alone and defenseless in his cell, resisted every pressure brought to bear on him. The members of the Commission of Inquiry visited him daily, and obtained

nothing. It occurred at last to John Prestice to make use of an influence that might succeed better than his—that of Mrs. Scorbitt. No one was ignorant of the lengths to which the widow would go when the celebrated calculator was in peril.

There was a meeting of the Commission, and Mrs. Scorbitt was authorized to visit the prisoner as often as she thought fit. Was not she threatened with the danger from the recoil of the monster cannon as much as any other of the world's inhabitants? Would her New Park mansion escape the final catastrophe any more than the wigwam of the poor Indian or the humble hut of the backwoodsman? Was not her life as much in danger as that of the obscurest Samoyed or South Sea Islander? The president of the Commission elaborately explained this to her, and suggested that she should bring her influence to bear for the general good.

If she could only get J. T. Maston to state where Barbicane and Nicholl had gone, there would still be time to pursue them and save humanity from the impending fate.

And so Mrs. Scorbitt had access to the jail. What she desired above all was to see J. T. Maston, who had been torn by the police from the comforts of his cottage. Let it not be supposed that the heroic Evangelina was a slave to human weakness. And if, on the 9th of April, some indiscreet ear had been applied to the keyhole the first time that the widow appeared in the cell, this is what would have met it:

"At last, dear Maston, I see you again!"

"You, Mrs. Scorbitt!"

"Yes, my friend, after four weeks, four long weeks of separation—"

"Exactly twenty-eight days, five hours, forty-five minutes," said Maston, looking at his watch.

"At last we meet!"

"But why, Mrs. Scorbitt? Why have they allowed you to come here?"

"To use whatever influence a boundless admiration may have on him who is its object!"

"What!" exclaimed J. T. Maston, "you have consented to talk thus to me! You have imagined that I would betray my colleagues?"

"Do you think so meanly of me? I to ask you to sacrifice your safety to your honor? I to urge you to an act which would be the disgrace of a life consecrated to the highest speculations of the higher mechanics?"

"Bravo, Mrs. Scorbitt! I recognize the worthy shareholder of our Association! Never did I doubt your courage!"

"Thank you, dear Maston."

"As for me, to divulge our work; to reveal at what spot on the surface of the earth our effort is to be made; to sell the secret I fortunately kept hidden within me; to permit these barbarians to launch off in pursuit of our friends, to interrupt the labors they are engaged in for our profit and our glory! I would rather die first!"

"Maston, you are sublime!" said Evangelina.

In truth, these two beings, so closely united in enthusiasm—and equally mad—were born to understand each other.

"No!" continued Maston. "Never shall they know the name of the country which my calculations have designated, and which will become immortal. They may kill me if they will, but they shall never possess my secret."

"And they may kill me with you," said Mrs. Scorbitt; "for I also will be dumb."

"Fortunately, they do not know that you possess the secret."

"Do you think I am capable of revealing it because I am only a woman? to betray our colleagues and you? No, my friend; no! The Philistines may raise the world against you to tear you from your cell, but I will be with you, and we shall have at least the consolation of dying together!"

And that was the way the conversation ended every time the widow visited the prisoner. And every time the Commissioners inquired as to the result the answer was the same.

"Nothing yet; but in time I hope to obtain what you want!"

Oh, the astuteness of woman!

"In time!" she said. But time marched on; weeks went by like days, days like hours, hours like minutes.

It was now May. Mrs. Scorbitt had obtained nothing;

and if she had failed, who could hope to succeed? Was the world to resign itself to this terrible blow without a chance of hindering it?

Well, no! in such things resignation is unacceptable. Our friends the delegates were unceasing in fomenting the excitement. Jansen overwhelmed the Commissioners daily. Karkof picked a quarrel with the secretary. Donellan, to make things worse, directed attention to another victim in the shape of the codfish merchant, Forster, who had sunk into insignificance after the auction sale, to bid at which he had been engaged. And in order to bring the phlegmatic fishmonger prominently to the front, the Canadian attempted to knock him down. To complicate matters further, "the friendly Powers" began "to bring pressure to bear" on the Washington Government, which had quite enough to do to withstand the "pressure" of its own people. In reply the Washington Government issued a circular authorizing the arrest of the two "malefactors" by any power whatsoever. But none the less did it remain impossible to discover where the malefactors had gone.

Then the Powers hinted that if J. T. Maston were properly dealt with, J. T. Maston would reveal the secret. But the Government might as well have tried to extract a word from Harpocrates, the god of silence, or from the chief deaf-mute of the New York Institute.

And then the exasperation increased with the general anxiety, and a few practical minds drew attention to the fact that the torture system of the Middle Ages was not without some advantages. So it was proposed to introduce, for the benefit of J. T. Maston, a few experiments with the "boot," the "scavenger's daughter," "molten lead," "boiling oil," the "wooden horse," the "bastinado," etc., etc. But such things were impossible in the century which invented the magazine rifle, roburite, bellite, panclastite, and other "ites," not to mention the far superior meli-melonite.

J. T. Maston had, then, no fear of being put to the torture. All that could be done with him was to hope that he would speak, or that chance would speak for him.

CHAPTER XIII

A TRULY EPIC REPLY

TIME advanced, and so probably did the works of Barbicane & Co., but where, was the mystery.

But if their works were to require a foundry capable of casting a gun a million times larger than a four-hundred pounder, and a projectile weighing one hundred and eighty thousand tons, they would want thousands of workmen; and where, oh! where could they be?

In what part of the old or new world had Barbicane & Co. installed themselves so secretly as to be invisible to the nations around? Had they gone to some desert island of the Pacific? But there are no desert islands now. That they had gone to the Arctic or Antarctic regions was extremely unlikely, for those were the very regions they intended to displace.

There was no need to look for them all over the world, for J. T. Maston's note-book had revealed the fact that the shot must be fired from near the Equator. Along the equinoctial line, they might be in Brazil or Peru, or Sumatra, or Borneo, or Celebes, or New Guinea, but surely they would have been discovered by the people in the neighborhood? All through Africa, too, they would be almost certain of discovery. There remained the Maldive Islands, the Admiralty, Gilbert, and Christmas Islands, the Galapagos and San Pedro Islands; but all these had been searched, and no trace of Barbicane & Co. had been found.

And what did Alcide Pierdeux think of all this? More "sulphuric" than ever, he knew no rest in considering the different consequences of the problem. That Captain Nicholl had invented an explosive of such power that its expansion was three or four thousand times greater than the most violent explosives used in modern war, and five thousand six hundred times stronger than "good old gunpowder," was, he remarked, "étonnant, not to say détonnant!" but it was not impossible. No one knows what the future has in store for us in that kind of progress. In the

shifting of the Earth's axis by means of the recoil of a gun there was nothing to surprise him.

"It is evident," he said to himself, "that every day the Earth receives the counter-shock from every shock produced on its surface! It is certain that when hundreds of thousands of men amuse themselves by sending thousands of projectiles weighing pounds, or millions weighing ounces, even when I walk or jump, or when I stretch out my arm, or when a blood corpuscle circulates in my veins, it must in some way influence the mass of our spheroid. But in the name of an integral will Barbicane's jolt be sufficient to upset the Earth? If the equations of that brute Maston really demonstrate that, we must make up our minds to it!"

In truth, Alcide could not but admire the ingenious calculations of the secretary of the Gun Club, communicated by the Commission of Inquiry to the mathematicians who could understand them. And Alcide, who read algebra as if it were newspaper, found the study of them extremely interesting.

But if the upset did come, what a dreadful state of affairs there would be in the world! What cities thrown down, what mountains shaken, what people destroyed by millions, what waters hurled from their beds, what fearful terrors! It would be such an earthquake as had never quaked before!

"If Nicholl's powder," he said, "was not quite so strong, the projectile might return to give the Earth another shock either before or behind the firing-point, after making the turn of the globe, and then everything might soon be knocked back into place, after causing immense destruction, nevertheless! But they are going to throw it overboard! Thanks to their meli-melonite their shell will describe the half of a hyperbola and never come back to beg pardon for having given that kick to the terrestrial ball!"

And Alcide threw his arms about like the semaphore at Portsmouth Dockyard, at the risk of breaking everything within a radius of six feet of him.

"If the firing-point were known I could soon find the great circles in which the alteration will be zero, and the places where it will reach the maximum, so as to give

folks notice to clear out and save themselves from being smashed by their houses tumbling about their ears! But how am I to know that firing-point?"

And he ran his fingers through the very little hair that had been left him.

"The results of the shock may be much more complicated than they imagine! Why should not the volcanoes take the opportunity to favor us with a few disorderly eruptions, and, like a first voyager, displace some of the matter in their insides? Why should not the uplifted ocean take a header into some of the craters? There's a chance for you! That would give an explosion that might send the whole tellurian box of tricks sky high, or rather sky higher! What do you say to that, you confounded Maston? You obstinate mute! What do you mean by juggling with our poor Earth as if it were a ball on a billiard table?"

These alarming hypotheses of Sulphuric Alcide were taken up and discussed by the newspapers all over the world. The pyrotechnic display organized by Barbicane & Co. would end in waterspouts, tidal waves, deluges, would it? But such catastrophes would only be partial! Thousands of people would disappear, and the rest would hardly notice anything worth mentioning! As the fatal day approached, fear came over the bravest. It might have been the dreadful year 1000 from the way in which the people generally conducted themselves.

What happened in that year 1000 it may be interesting to recall. Owing to a passage in the Apocalypse, the people of Europe were persuaded that the Day of Judgment was nigh. They waited for the signs of wrath; the son of Perdition, Antichrist, was to be revealed.

"In the last year of the tenth century," relates H. Martin, "everything was interrupted—pleasures, business, interest, even the work in the fields. 'Why,' said the people, 'should we provide for a future that will never come? Let us think of eternity, which will begin tomorrow.' They provided only for their immediate needs; they handed over their lands and castles to the monasteries to obtain their protection in the kingdom in the skies which was about to come to them. Many of the deeds of gift to

the churches begin with the words, 'The end of the world approaching, and its ruin being imminent.' When the end of the fatal term arrived the people kept within the basilicas, the chapels, the edifices consecrated to God, and waited in agony for the seven trumpets of the seven angels of judgment to sound in the sky."

As we know, New Year's Day, 1000, was reached without any disturbance in the laws of Nature. But this time the expectation of the catastrophe was not based on a doubtful interpretation of a text. It was a change to be applied to the earth's equilibrium based on indisputable calculations, which the progress of the ballistic and mechanical sciences rendered quite possible. This time it was not the sea that would give back the dead, but the sea that would engulf millions of the living.

Under these circumstances, the position of J. T. Maston became daily more critical. Mrs. Scorbitt trembled lest he should become the victim of the general mania. Sometimes she thought of advising him to speak the word which he so obstinately kept to himself. But she dared not, and she did well. It would have been to expose herself to a categorical refusal.

The city of Baltimore was a prey to terror, and it became difficult to restrain the populace, who were being excited even unto madness by the newspapers, by the telegrams which they published from the four angles of the earth, to use the apocalyptic language of St. John the Evangelist in the days of Domitian. Assuredly, if J. T. Maston had lived under that persecuting emperor, his business would soon have been settled. He would have been thrown to the beasts. But he would have contented himself with replying:

"I am there already!"

But no matter what happened, he refused to reveal the position of place *x*, knowing well that if he divulged it Barbicane and Nicholl would be prevented from continuing their work.

After all, there was something grand in this struggle between one man and the entire world. J. T. Maston increased in grandeur in the mind of Mrs. Scorbitt, and also in the opinion of his colleagues of the Gun Club. These gallant fellows were as obstinate as retired artillery-

men, and never swerved from their support of Barbicane & Co. The secretary of the Gun Club reached such a height of celebrity that a number of persons even wrote to him, as they do to famous criminals, to obtain a few lines from the hand of the man who was going to upset the globe.

This was all very fine, but it was more and more dangerous. The populace thronged day and night around the jail of Baltimore. There was great shouting and much tumult. The mob would have lynched J. T. Maston there and then if they could; and the police saw the time was coming when they could no longer protect him.

Desirous of satisfying the American mob, as well as the mob of other countries, the Washington Government decided to bring J. T. Maston to trial.

With a jury selected from the terrified masses, "the affair would not hang about long," to quote the words of Alcide, who felt a kind of sympathy for the calculator's tenacity.

On the 5th of September, the President of the Commission visited the prisoner in his cell.

Mrs. Scorbitt, at his urgent request, was allowed to accompany him. Perhaps at the last attempt the influence of this amiable lady might be successful. It would not do to neglect anything. All means were legitimate that might secure the word of the enigma. If they did not succeed, they would see!

"They will see!" said the knowing ones. "Suppose they hang J. T. Maston, and the catastrophe takes place all the same?"

At eleven o'clock, then, Maston found himself in the presence of John Prestice and Evangelina Scorbitt.

"For the last time," said Prestice, "will you answer me?"

"What about?" said Maston.

"Where has your colleague, Barbicane, gone to?"

"I have already told you a hundred times."

"Repeat it for the hundred and first."

"He has gone where he will fire the cannon."

"And where will he fire the cannon?"

"Where Barbicane is at this present moment."

"Take care, Maston!"

"Of what?"

"Of the consequences of your refusal to reply. The result will be—"

"That you will not discover what you have no right to know."

"What we have the right to know."

"That is not my opinion."

"We are going to put you on your trial."

"You can put me on my trial."

"And the jury will find you guilty."

"Let them find me guilty."

"And the sentence will immediately be given and immediately executed."

"Very well."

"Dear Maston!" said Evangelina, whose heart trembled at the prospect.

"Oh! Mrs. Scorbitt," said J. T. Maston.

She bowed her head, and was silent.

"Would you like to know what the sentence will be?"

"Yes, if you like."

"You will be hanged, as you deserve."

"Really."

"And you will be hanged, sir, as sure as two and two make four."

"Then, sir, I shall have a chance," said the phlegmatic Maston. "If you were only the least bit of a mathematician you would not say as sure as two and two make four. What is it that proves that all mathematicians up to now have not been mad in asserting that the sum of two numbers is equal to that of their parts, that two and two make exactly four?"

"Sir!" exclaimed the president, completely puzzled.

"Ah!" continued Maston. "If you had said as sure as one and one make two, all right! That is absolutely evident, for it is no longer a theorem, it is a definition."

At this lesson in arithmetic, the president of the Commission retired, while Mrs. Scorbitt's eyes were ablaze with admiration for the extraordinary abilities of her beloved calculator.

CHAPTER XIV

THE GEOGRAPHICAL VALUE OF *x*.

FORTUNATELY for J. T. Maston, the Federal Government unexpectedly received the following telegram:

"To John S. Wright, Washington, U. S. A.

"Zanzibar, 13th September, 5 a. m., local time. Great foundries have been established among the Wamasai to the south of Kilimanjaro. For eight months Impey Barbicane and Nicholl have been there, with hundreds of black workmen under the authority of the Sultan Bali-Bali. Information for Government purposes.—Richard W. Trust, U. S. Consul."

And that is how the great secret was discovered. And that is why the secretary of the Gun Club was not hanged.

But who can say that he did not live to regret that he was not removed from mankind in all the plenitude of his glory?

Anyhow the fact of the discovery is so important in our history that we shall only be treating it with due respect in giving it this chapter to itself.

CHAPTER XV

INTERESTING FOR THE INHABITANTS OF THE TERRESTRIAL SPHEROID

AND so the Washington Government knew where Barbicane & Co. had commenced business. There could be no doubt as to the authenticity of the telegram. The Consul of Zanzibar was too cautious a man for his information to be doubted, and it was confirmed by subsequent telegrams. The gigantic works of the North Polar Practical Association were in full swing in the center of the Kilimanjaro region, about three hundred miles from the East Coast of Africa, a little below the equinoctial line.

How had they come to be installed so secretly in this lost country, at the foot of the famous mountain discovered in 1848 by Krapf and Rebmann? How had

Barbicane & Co. been able to build their foundries and collect their staff? By what means had they managed to enter into peaceful relations with the savage tribes of the district, and their cruel and grasping chiefs? Nobody knew. And as there were only a few days to run before the 22nd, it was not unlikely that nobody would know.

When J. T. Maston learned from Evangelina that the mystery of Kilimanjaro had been cleared up by a telegram from Zanzibar—

"Pshaw!" he said, making a wonderful zigzag in the air with his iron hook. "They do not travel yet by telegraph or telephone; and in six days—patarapatanboom-boom—all will be ready!"

And any one who heard the secretary of the Gun Club deliver the sonorous onomatope, like a roar from a Columbiad, would have wondered at the amount of vital energy remaining in the old artilleryman.

But there was no doubt that he was right. There was no time to send messengers to the Wamasai to arrest Impey Barbicane. Even if the messengers started from Egypt, or Aden, or Massowah, or Zanzibar, however quickly they might travel, they would have to contend with the difficulties of the country, with the obstacles unavoidable on a road through a mountainous region, and probably with followers acting under the orders of a sultan as despotic as he was black.

All hope would have to be given up of stopping the operation or arresting the operator.

But, if that was impossible, nothing was easier now than to know the worst that could happen. The firing-point had been revealed, and it was a simple matter of calculation—a complicated calculation evidently, but not beyond the capacities of algebraists in particular and mathematicians in general.

At first the Government kept the despatch secret, their object being to be able to indicate when they published it what would be the results of the displacement of the axis with regard to the alteration in the level of the waters. The inhabitants of the world would then know the fate that was in store for them, according to the segment of the spheroid on which they resided.

On the 14th of September the telegram was sent to the

Longitudes Office at Washington, with instructions to work out the final consequences, ballistic and geographical. The next day but one the information was ready. It was cabled at once to all the Governments of the new and old worlds, and having been printed in thousands of newspapers, it was cried in all the great cities by all the newsboys of the globe, as—

"What is going to happen?"

Which was the question being asked in every language just then.

And this is the reply as given by the Longitudes Office.

"IMPORTANT NOTICE.

"The experiment to be attempted by Barbicane & Co. is as follows:

"To produce a recoil on the 22nd of September at midnight, local time, by means of a monster cannon throwing a projectile of one hundred and eighty thousand tons.

"If this discharge is effected just below the Equator, near the thirty-eighth meridian, at the base of the Kilimanjaro chain, and if it is directed toward the south, the mechanical effect on the terrestrial spheroid will be as follows:

"At once, owing to the shock being combined with the diurnal movement, a new axis will be formed, the old axis being 23° 28′, and the new one being perpendicular to the plane of the ecliptic.

"In the north the extremity of the new axis will be situated between Greenland and Grinnell Land, on that part of Baffin Sea cut by the Arctic Circle. In the south it will be on the Antarctic Circle to the east of Adelaide Land.

"As an example of the new meridians, we may mention that passing through Dublin in Ireland, Paris in France, Palermo in Sicily, Obeid in Darfur, Kilimanjaro, Kerguelen Island, the new Antarctic Pole, the Society Islands in the Pacific, Vancouver Island, and Melville Peninsula.

"The new Equator will pass through the Kilimanjaro country, the Indian Ocean, Goa, a little below Calcutta, Mangala in Siam, Hong Kong, the Marshall and Walker

Islands in the Pacific, Rio Janeiro, Saint Helena, and by St. Paul de Loanda across Africa to Kilimanjaro.

"The new Equator having been formed by the new axis, it is possible to calculate the results on the ocean levels.

"It is worthy of note that Barbicane & Co., or rather the directors of the North Polar Practical Association, have evidently been desirous of doing as little damage as possible. Had the discharge been effected toward the north, the consequences would have been disastrous for the most civilized portions of the globe; but by firing toward the south the consequences, so far as the submergence of the land is concerned, will only affect the less peopled and wilder countries.

"The globe will, for the purposes of this inquiry, be divided by two great circles, intersecting at right angles at Kilimanjaro and the antipodes of that mountain, thus giving four segments, two in the northern hemisphere, and two in the southern hemisphere, separated by lines in which no alteration of level will occur.

"1. The northern hemisphere:

"The first segment, to the west of Kilimanjaro, will comprise Africa from the Congo to Egypt, Europe from Turkey to Greenland, America from British Columbia to Peru and Brazil north of San Salvador—in fact the whole of the North Atlantic and the greater part of the Equatorial Atlantic.

"The second segment, to the east of Kilimanjaro, will comprise the greater part of Europe from the Black Sea to Sweden, the Russian Empire, Arabia, almost all India, Persia, Beloochistan, Afghanistan, Turkestan, the Celestial Empire, Mongolia, Japan, Corea, the Northern Pacific and Alaska—and also the Polar regions, so regrettably placed in the possession of Barbicane & Co.

"2. The southern hemisphere:

"The third segment, to the east of Kilimanjaro, will comprise Madagascar, Kerguelen Island, Mauritius, and all the islands of the Indian Ocean, the Antarctic Ocean to the New Pole, the Malay Peninsula, Java, Sumatra, Borneo, the Philippines, Australia, New Zealand, and all the southern Pacific up to the meridian of the Society Islands.

"The fourth segment, to the west of Kilimanjaro, will

include Africa south of the Congo and the Mozambique Channel, the Cape of Good Hope, the South Atlantic, South America below Pernambuco and Lima, Bolivia, Brazil, Uruguay, the Argentine Confederation, Tierra del Fuego, the Sandwich and South Shetland Islands, and a portion of the South Pacific.

"Such will be the four segments of the globe divided by lines of no alteration in level.

"In each of these four segments there will be a central point where the effect will attain its maximum, either of increase or decrease.

"This maximum will approach 25,000 feet at each point and at the point the consequences will be most serious.

"In two of the segments situated opposite each other in the northern and southern hemispheres, the sea will retire to flow into the two other segments.

"In the first segment the Atlantic Ocean will almost entirely empty itself, the point of maximum being about the Bermudas, where the bottom will become visible if the depth of the sea in that locality be less than 25,000 feet. Consequently, between America and Europe, vast territories will be revealed, which the United States, Great Britain, France, Spain and Portugal can annex *pro rata* to their Atlantic coast-lines, or otherwise, as they may think fit. But it must be remembered that as the waters are lowered, so will the air be. The coast of Europe and America will be lifted to such an extent, that towns placed twenty or even thirty degrees from the point of maximum, will have no more air than is now available at three miles from the surface of the sea. New York, Philadelphia, Charlestown, Panama, Lisbon, Madrid, Paris, London, Edinburgh, Dublin will be thus elevated, but Cairo, Constantinople, Dantzic, Stockholm on one side, and the western coast towns of America on the other, will retain their present level. The Bermudas will be in such rarefied air as has hitherto been only experienced by aeronauts, and will become as uninhabitable as the upper peaks of the mountains of Tibet.

"Similar effects will be experienced in the opposite southern segment comprising the Indian Ocean, Australia, and the Pacific. At Adelaide and Melbourne the level of the sea will sink 25,000 feet below them, and the air

will become so pure and rarefied as to be unbreathable.

"Such are the two segments from which the waters will retire. In the sea that will be left there will probably be many new islands, formed by the summits of submarine mountain-chains.

"In the other segments the waters will rise to a corresponding height.

"In the segment north-east of Kilimanjaro the maximum will be at Yakutsk in Siberia. This town will be submersed under 25,000 feet of water—less its actual altitude—and thence thinning out on all sides the flood will spread out over Asiatic Russia, India, China, Japan and Alaska. The Ural Mountains may possibly appear above the waters as islands. St. Petersburg and Moscow on one side, Calcutta, Bangkok, Saigon, Pekin, Hong Kong, and Tokyo, on the other, will disappear beneath the waves at variable depths, but at depths quite sufficient to drown such of the Russians, Hindoos, Siamese, Cochinchinese, Chinese, and Japanese who have not left the country before the catastrophe.

"In the segment south-west of Kilimanjaro the disasters will not be of such magnitude, as the segment is in a great measure covered by the Atlantic and Pacific, the level of which will rise 25,000 feet above the Falkland Islands. But nevertheless much territory will disappear, among others all South Africa from the Gulf of Guinea and Kilimanjaro to the Cape of Good Hope, all South America south of Central Brazil and Peru, including Chili, the Argentine Republic down to Tierra del Fuego. The Patagonians, however tall they may be, will not escape destruction, as they will not even have the resource of escaping to the Cordilleras, not one of whose summits will in those parts rise above sea-level.

"Such will be the results produced by the changes of the level of the waters. And such are the eventualities for which those interested must prepare, unless something happens to prevent the dastardly enterprise of Barbicane & Co."

CHAPTER XVI

THE CHORUS OF TERROR

ACCORDING to the "important notice," the dangers of the position could be avoided, or rather fled from, by hurrying off to the neutral zones.

The people in peril could be divided into two classes, the asphyxiated and the drowned.

The effect of the communication was to give rise to very different opinions, which soon developed into the most violent protestations.

On the side of the asphyxiated were the Americans of the United States, the Europeans of the United Kingdom, and France, Spain, etc. The prospect of being able to annex territories from the ocean-bed was not attractive enough to persuade them to accept the change.

On the side of the drowned were the inhabitants of South America, and the Hindoos, Russians, and Chinese. But Great Britain was not likely to allow Barbicane & Co. to deprive her of her southern colonies; and the other nations decidedly objected to being so summarily disposed of. Evidently the Gulf of Mexico would be emptied to form a huge territory of the Antilles, which the Mexicans and Americans might claim in accordance with the Monroe Doctrine. Evidently the lift of the Philippines and Celebes would bring up an immense region which the British and Spanish might share. But vain such compensation! It would never balance the loss due to the terrible inundation.

If the new seas were only to rise over the Samoyeds, Laps, Fuegians, Patagonians, Tartars even, Chinese, Japanese, or even Argentines, the world might have borne the bereavement. But the catastrophe affected too many of the great Powers for them to bear it quietly.

Although the central part would remain much as it is, Europe would be lifted in the west and lowered in the east, that is to say half asphyxiated on one side and half drowned on the other.

Such a state of affairs was unacceptable. Besides, the Mediterranean would be nearly drained dry, and that neither French, Italians, Spaniards, Greeks, Turks, nor Egyptians cared for, as their position on its coast gave

them indisputable rights over the sea. And what would be the use of the Suez Canal, which would escape, owing to its position on the neutral line? What was to be done with that when there was no Mediterranean at one end and very little Red Sea at the other—unless it was lengthened by several hundred miles?

Great Britain had no desire to see Gibraltar, Malta, and Cyprus transformed into mountain-tops which ironclads would try to anchor near in vain. And the British Government declined to entertain in any form the suggested compensation from the risen bed of the Atlantic.

In short, all the world was in arms against Barbicane & Co. Even the people on the neutral lines were urgent in their protests. And so it soon came about that Barbicane, Nicholl, and J. T. Maston were put under the ban of humanity.

But how the newspapers prospered! What a rush there was for copies! What editions after editions! For the first time in the history of the newspaper press all the papers of every country in the world were agreed upon one matter. And the effect of that is more easily imagined than described!

J. T. Maston might well believe that his last hour was come.

In fact, a frantic mob broke into his prison on the evening of the 17th of September with the intention of lynching him, and it is well to say, the police made no objection.

The cell was empty! With the worthy calculator's weight in gold, Mrs. Scorbitt had managed his escape. The jailer was the more ready to be bribed by a fortune as he had hopes of enjoying it for some years. In fact, Baltimore, like Washington, New York, and the other chief cities of the Atlantic seaboard, was in the list of towns to be reasonably elevated, and in which there would remain enough air for the daily consumption of their inhabitants.

J. T. Maston had gained some mysterious retreat where he was safe from the fury of popular wrath. Thus was the life of the great world-troubler saved by a woman's devotion.

And now only four days remained before Barbicane &

Co. did their awful deed. The important notice had been generally understood. If there had been a few skeptics before, there were none now. The Government issued proclamations to such of their peoples as were to be sent up into the rarefied air, and to the greater number that were to be dropped into deep water.

The result was such a migration as had never been seen, not even when the Aryan families began to remove. An exodus took place comprising every branch of the Hottentots, Melanesians, Negroes, Red Men, Yellow Men, Brown Men, White Men.

Unfortunately the time was too short. It could be reckoned in hours. Given a few months, the Chinese might abandon China, the Australians Australia, the Patagonians Patagonia, the Siberians Siberia.

But time! Time! The time! How was it possible? Migration was useless.

There was only one chance!

Suppose that Barbicane & Co. were to fail?

CHAPTER XVII

THE WORKS AT KILIMANJARO

THE country of the Wamasai is situated in the east of Central Africa, between Zanzibar and the great lakes. Our knowledge of it is due chiefly to Thomson, Johnston, Count Tekeli and Doctor Meyer. It is a mountainous district under the sovereignty of the Sultan Bali-Bali, whose people are negroes, and number from thirty to forty thousand.

Three degrees south of the Equator rises the chain of Kilimanjaro, which lifts its highest summit over 18,000 feet above the sea, and commands northward, southward, and westward, the vast and fertile plains of the Wamasai.

A few miles below the first slopes of the mountain lies the town of Kisongo, where the Sultan resides. The capital is, truth to tell, but a large village. It is occupied by a population, highly gifted and intelligent, and working hard as much by itself as by its slaves under the iron yoke of Bali-Bali, who is justly considered to be one of the most remarkable sovereigns of Central Africa.

Impey Barbicane and Captain Nicholl, accompanied by ten foremen devoted to the enterprise, had arrived at Kisongo in the first week of January. The fact of their departure had only been communicated to J. T. Maston and Mrs. Scorbitt. They had embarked at New York for the Cape of Good Hope; thence they had gone to Zanzibar; and a bark, secretly chartered, had taken them to Mombasa on the other side of the channel. An escort from the Sultan had met them at this port, and after a difficult journey of about 300 miles across this harassed region, obstructed by forests, cut up by streams, and checkered with marshes, they had reached the royal residence.

As soon as he had obtained J. T. Maston's calculations, Barbicane had put himself in communication with Bali-Bali through a Swedish explorer who intended to spend a few years in this part of Africa. The Sultan had become one of the warmest admirers of the audacious Yankee after the celebrated Moon Voyage, the fame of which had spread even to this distant country. Without disclosing his object Barbicane had obtained from the Wamasai the needful authority to open important works at the southern base of Kilimanjaro. For the very considerable sum of three hundred thousand dollars Bali-Bali had engaged to furnish him with the labor he required to do what he liked with Kilimanjaro. He could take it down if he liked, or carry it away if he could; and he became as much the owner of the mountain as he was of the North Pole.

Barbicane and his colleague were cordially welcomed at Kisongo. Bali-Bali felt an admiration bordering on adoration for the two illustrious voyagers who had launched out into space to attain the circumlunar regions, and sympathized enthusiastically with the projectors of the mysterious works they wished to establish in his kingdom. He undertook that the enterprise should be kept secret, both by himself and his subjects, for all of whom he could answer, as not one of the negroes engaged had the right to leave the works for a day under penalty of the most dreadful punishments.

On this account the operation was enveloped in a mystery that the cleverest detectives of America and

Europe failed to penetrate, and if it was discovered at last it was because the Sultan had relaxed his severity after the completion of the works, and that there are traitors or chatterers even among negroes. It was in this way that Richard W. Trust, the consul at Zanzibar, got wind of what was happening at Kilimanjaro. But at that date, the 13th of September, it was too late to stop Barbicane in the accomplishment of his plans.

The reason that Barbicane & Co. had chosen the country of the Wamasai as the scene of their operations was that, in the first place, it was little known and rarely visited by travelers, and, secondly, that the mass of Kilimanjaro offered all the qualities of solidity and position necessary for their work. Besides, the country was rich in all the materials they required, and these were found under conditions that made them easily workable.

A few months before leaving the United States, Barbicane had learned from the Swedish explorer that iron and coal were abundant in the Kilimanjaro chain. There were no mines to be opened, and no shafts to be driven thousands of feet into the crust of the earth. The minerals were on the surface, and had only to be picked up from the ground. And in addition to these, there were large deposits of nitrate of soda and iron pyrites, such as were required for the manufacture of the meli-melonite.

Barbicane and Nicholl had brought no staff of workmen with them except the ten foremen, on whom they could depend. These could take command of the ten thousand negroes placed at their disposal by Bali-Bali, to whom was entrusted the task of making the monster cannon and its no less monster projectile.

A fortnight after the arrival of Barbicane and his colleague among the Wamasai, three large workshops had been erected on the south of the mountain; one as the foundry for the gun, one as the foundry for the shot, and one as the factory for the meli-melonite.

And how did Barbicane & Co. intend to cast a cannon of such colossal dimensions? The only chance for the inhabitants of the world was, as we have seen, in the difficulty of dealing with such a huge undertaking.

To cast a cannon a million times larger than a four hundred pounder would have been beyond the power of

man. To make a four hundred pounder is difficult enough, but a four hundred million pounder! Barbicane & Co. did not attempt to do so. It was not a cannon, nor even a mortar, that they had in their minds. They simply intended to drive a gallery into the mountain.

Evidently this enormous mine would have the same effect as a gigantic Columbiad, the manufacture of which would have been as costly as it was difficult, owing to the thickness it would have to be to avoid the risk of bursting. Barbicane & Co. had always intended to act in this way, and if J. T. Maston's note-book spoke of a cannon, it was the four hundred pounder he had taken as the basis of his calculations.

Consequently, a spot was chosen a hundred feet up the southern side of the chain, from the base of which the plains extended for miles and miles, so that nothing would be in the way of the projectile when it was hurled from the long tube in the mass of Kilimanjaro.

With great precision and much labor Barbicane carried on the driving of his tunnel. Easy to him was the construction of boring machines worked with air compressed by the power of the large waterfalls in the district. The holes bored by the machines were charged with melimelonite, and the blasting of the rock was easy, it being a kind of syenite composed of orthoclasic felspar and amphibolic hornblende. It was a favorable circumstance that a rock so constituted would strongly resist the frightful pressure developed by the expansion of the gas; but the height and thickness of the mountain afforded ample security against any exterior splitting or cracking.

The thousands of workmen under the guidance of the ten foremen, superintended by Barbicane, progressed with such zeal and intelligence that in less than six months the tunnel was finished. It measured nearly ninety feet in diameter and two thousand feet long. As it was important that the projectile should glide along a perfectly smooth surface without losing any of the gas of deflagration, the interior was lined with a smooth tube of cast iron. This was a much larger affair than the celebrated Columbiad of Tampa Town, which had sent the aluminium projectile around the Moon. But what is there that is impossible to the engineers of the modern world?

While the boring went on in the flank of Kilimanjaro, the workmen were busy at the second foundry. While the tube was being built the enormous projectile was in process of manufacture.

All it consisted of was a mass of cast-iron, cylindro-conical in form, weighing one hundred and eighty thousand tons. It had never been intended to make such a casting in one piece, but to provide one hundred and eighty masses, each of one thousand tons, which could be hoisted into the tube and arranged in front of the meli-melonite so as to form a compact charge.

It thus became necessary to furnish the second foundry with four hundred thousand tons of ore, seventy thousand tons of flux, and four hundred thousand tons of good coal, which at the outset was transformed into two hundred and eighty thousand tons of coke. As the deposits were all in the vicinity, this was only a matter of transport.

The greatest difficulty was the construction of the blast furnaces for dealing with the ore; but nevertheless, before a month was out ten furnaces were at work, capable, each, of an output of one hundred and eighty tons a day. This gave eighteen hundred tons in the twenty-four hours, and a hundred and eighty thousand tons in ten working days.

In the meli-melonite factory the work went on easily, and so secretly that the composition of the explosive was never discovered. All went well; and there was hardly an accident to mar the progress.

The Sultan was delighted. He followed the operations with indefatigable assiduity, and it may be imagined how his Majesty's presence stimulated the zeal of his faithful subjects.

When he asked what it all meant, Barbicane would reply enigmatically:

"It is a work which will change the face of the world!"

"A work," Captain Nicholl would add, "that will confer on the Sultan Bali-Bali a glory that will never fade among the monarchs of Eastern Africa!"

And that the Sultan of the Wamasai felt proud there is no need for us to insist!

On the 29th of August the works were completed. The tunnel was lined with the smooth iron tube built up within it. At the end lay stored two thousand tons of

meli-melonite in communication with the box of fulminate. Then came the projectile three hundred and forty-five feet long. In front of the projectile was a space of fourteen hundred and fifty feet in which effect would be given to the impulse due to the expansion of the gas.

That being the case, there remained the question—a question of pure ballistics—would the projectile have the trajectory assigned to it by J. T. Maston? The calculations were correct. They indicated in what measure the projectile would deviate to the east of the meridian of Kilimanjaro in virtue of the earth's rotation, and what would be the form of the hyperbolic curve which it described in virtue of its enormous initial velocity.

Second question: Would it be visible during its flight? No, for when it left the tube plunged in the darkness of the earth, it could not be seen, and besides owing to its moderate height it would have a very considerable angular velocity. Once it entered the zone of light, the smallness of its volume would conceal it from the most powerful glasses, and for a stronger reason it would, when free from the influence of terrestrial attraction, gravitate forever around the Sun.

Assuredly Barbicane & Co. might be proud of the work they were about to complete. Why was not J. T. Maston there to admire the admirable execution of the works which was worthy of the precision of the calculations that had inspired them? And above all things why was he far away when the formidable detonation would awake the echoes of the most distant horizons of Africa?

In thinking of him his colleagues had no notion that he had had to leave Ballistic Cottage after escaping from Baltimore jail, and was now in hiding to save his precious life. They knew not to what a degree public opinion had risen against the North Polar Practical Association. They knew not what would be the massacres, quarterings, and roastings if the people happened to lay hold of them. Indeed they were fortunate that when the mine was fired they could only be saluted by the shouts of the Wamasai.

"At last!" said Captain Nicholl, when on the evening of the 22nd of September they were strolling about at the mouth of the mine.

"Yes! At last! And also—Ha!" and Barbicane gave a sigh of relief.

"If you had to begin again?"

"Bah! We should begin again!"

"What luck," said Nicholl, "that we should have at our disposal this admirable meli-melonite!"

"Which will make you illustrious, Nicholl!"

"Doubtless, Barbicane," said the captain modestly. "But do you know how many galleries we should have had to drive in the flanks of Kilimanjaro to obtain the same result if we had only had fulmi-cotton like that which flung our projectile at the Moon?"

"Tell me."

"One hundred and eighty, Barbicane!"

"Well, we would have driven them!"

"And a hundred and eighty projectiles of a hundred and eighty thousand tons!"

"We would have made them, Nicholl!"

There is no nonsense about men of this stamp. But when artillerists have made the round of the Moon, of what could they not be capable?

* * * * *

And that very evening, an hour or two only before the discharge was to take place, and while Barbicane and Nicholl were thus congratulating themselves, Alcide Pierdeux, shut up in his room at Baltimore, jumped to his feet and whooped like a Redskin.

"Whoooop! Mr. J. T. Maston! You brute, you shall swallow your problem, you shall! And why didn't I see that before! In the name of a cosine! If I knew where you were I would ask you to supper, and we would have a glass of champagne together at the very moment your gun is to go off!"

And he capered around the room and whirled his arms about like a railway signal gone mad.

"Whoooop, you old plum-tree! You must have had a big bang when you calculated the cannon of Kilimanjaro! Hurrah for the cannon of Kilimanjaro; and how many more would you like? That is not only the *sine quâ non*, my boy, but the *sine cannon!* Whoooop!"

CHAPTER XVIII

THE WAMASAI WAIT FOR THE WORD TO FIRE

It was the evening of the 22nd of September—that memorable date to which public opinion assigned an influence as disastrous as that of the 1st of January, 1000.

Twelve hours after the sun passed the meridian of Kilimanjaro, that is to say, at midnight, the hand of Captain Nicholl would fire the terrible mine.

From Kilimanjaro to Baltimore is one hundred and fourteen degrees, or a difference in time of four hundred and fifty-six minutes. At the moment of discharge it would be twenty-four minutes past five in the afternoon in the great city of Maryland.

The weather was magnificent. The sun had just set on the plains of the Wamasai behind a perfectly clear horizon. Barbicane & Co. could not have wished for a better night, a calmer or a more star-lit one, in which to hurl their projectile into space. There was not a cloud to mingle with the artificial vapors developed by the deflagration of the meli-melonite.

Who knows? Perhaps Barbicane and Nicholl were regretting that they could not take their places inside the projectile? In the first second they could have traveled over seventeen hundred miles! After having penetrated the mysteries of the lunar world, they would have penetrated those of the solar world, and under conditions differently interesting from those of Hector Servadac on the comet Gallia!

The Sultan Bali-Bali, the great personages of his court, that is to say, his minister of finance and his minister of works, and the staff of black workmen, were gathered together to watch their final operation. But, with commendable prudence, they had taken up their position three miles away from the mouth of the mine, so as to suffer no inconvenience from the disturbance of the atmosphere.

Around them were a few thousand natives from Kisongo and the villages in the south of the province, who had been ordered by the Sultan to come and admire the spectacle.

A wire connecting an electric battery with the detonator

of the fulminate in the tube lay ready to fire the melimelonite.

As a prelude, an excellent repast had assembled at the same table the Sultan, his American visitors, and the notabilities of the capital—the whole at the cost of Bali-Bali, who did the thing all the better from his knowing he would be reimbursed out of the ample purse of Barbicane & Co.

It was eleven o'clock when the banquet, which had begun at half-past seven, came to an end by a toast proposed by the Sultan in honor of the engineers of the North Polar Practical Association and the success of their undertaking.

In an hour the modification of the geographical and climatological conditions of the Earth would be an accomplished fact.

Barbicane, his colleague, and the ten foremen began to take up their places around the hut in which the electric battery was placed.

Barbicane, chronometer in hand, counted the minutes—and never did they seem so long—those minutes which seemed not years, but centuries!

At ten minutes to twelve he and Captain Nicholl approached the apparatus which put the wire in communication with the cannon of Kilimanjaro.

The Sultan, his court, the crowd of natives, formed an immense circle around them.

It was essential that the discharge should take place at the precise moment indicated in the calculations of J. T. Maston, that is at the instant the sun touched the equinoctial line, which henceforth he would never leave in his apparent orbit around the terrestrial spheroid.

Five minutes to twelve!

Four minutes to twelve!

Three minutes to twelve!

Two minutes to twelve!

One minute to twelve!

Barbicane followed the hand of the chronometer, which was lighted by a lantern held by one of the foremen.

Captain Nicholl stood with his finger on the button of the apparatus ready to close the circuit.

Twenty seconds to twelve!

Ten seconds!

There was not the suspicion of a shake in the hand of the impassible Captain Nicholl. He and his friend were no more excited than when, shut up in the projectile, they waited for the Columbiad to despatch them to the Moon.

Five seconds!

One!

"FIRE!" said Barbicane.

And Nicholl's finger pressed the button.

The noise was truly awful. The echoes rolled in thunders far beyond the realm of the Wamasai. There was a shrill shriek of the projectile which traversed the air under the impetus from milliards of milliards of litres of gas developed by the instantaneous deflagration of two thousand tons of meli-melonite. It seemed as though there had passed over the surface of the Earth one of those storms in which are gathered all the fury of Nature.

And the effect could have been no more terrible if all the guns of all the artilleries of the world had been joined to the thunders of the sky to give one long continuous roar together.

CHAPTER XIX

J. T. MASTON REGRETS HE WAS NOT LYNCHED

THE capitals of the globe—and also the less important towns, and even the humbler villages—were, as a rule, waiting for the result in a paroxysm of terror. The newspapers took care that the exact moment corresponding to midnight at Kilimanjaro should be thoroughly well known.

At Baltimore, as we are aware, twelve hours after the passage of the Sun on the meridian of Kilimanjaro, it would be 5:24 p. m.

We need not enlarge on the agony of these moments. The most powerful pen of modern times would be helpless to describe them.

That the inhabitants of Baltimore ran no danger of being swept away by the rising sea may be very true! That they would not see Chesapeake Bay empty itself, and Cape Hatteras at the end become a mountain crest above the dried Atlantic, is agreed! But the city, like many

others not menaced with emersion or immersion, might be shattered by the shock, its monuments thrown down, and its streets engulfed in the abysses that might open in the ground! And was there not a justification for fearing for those other parts of the world which would never survive the displacement of the waters?

Why, certainly!

And so every human being in that city felt a cold shiver in the spinal marrow during that fatal minute. Yes! all trembled with terror—but one! And that one was Sulphuric Alcide, who was quietly sipping a cup of hot coffee as if he and the old world would last forever.

5:24 p. m., answering to Kilimanjaro midnight, passed.

At Baltimore—nothing occurred!

At London, Berlin, Paris, Rome, Constantinople—nothing! Not the least shock!

Professor Milne, in the coal-pit at Kagoshima, in Japan, gazed steadily at the tromometer, and saw not the least abnormal movement in the crust of the Earth in that part of the world.

At Baltimore there was no sign of any disturbance whatsoever. The sky was cloudy, and when the night came it was impossible to see if the apparent movement of the stars had changed—which would, of course, have indicated a change in the Earth's axis.

What a night did J. T. Maston pass in his retreat, unknown to all save Mrs. Scorbitt! He raged! He raved! He could not keep still. Would that he had been a few days older, to see if the curve of the Sun was modified—an indisputable proof of the success of the operation. On the 23rd the change would not be noticeable, for on that day the Sun invariably rises due east in every country of the globe.

In the morning the Sun rose just as usual.

Major Donellan and his friends were on the terrace of their hotel. They had furnished themselves with instruments of extreme precision, which would show if the Sun described its curve in the plane of the Equator.

There was nothing to show that it did; and a few minutes after it had risen the radiant disk inclined toward the southern hemisphere.

There was no change in its apparent path.

The Major and his colleagues expressed their delight by giving three cheers for the Sun.

The sky was superb, the horizon quite clear from the mists of the night, and never did the glorious orb present himself under greater conditions of splendor before a wondering people.

"And in the very place noted by the laws of astronomy!" said Baldenak.

"Of our old astronomy," said Karkof, "which these madmen attempted to annihilate!"

"To their cost and shame," said Jansen.

"And the Arctic regions will remain under their eternal ice!" said Professor Harald.

"Hurrah for the Sun!" shouted Donellan. "He is good enough for us as he is!"

"Hurrah! hurrah!" said the others on the balcony.

Then it was that Todrin, who had said nothing, remarked judiciously, "Perhaps they have not fired!"

"Not fired?" ejaculated the Major aghast.

And that, with a different intonation, was what J. T. Maston and Mrs. Scorbitt said.

"Not fired?"

And that was what the wise and the foolish were asking; and it was what Alcide Pierdeux said, adding, "Whether they fired or no, it does not matter! The Earth will still spin on its old axis!"

No one knew what had passed at Kilimanjaro; but before the end of the day an answer was given to the question that puzzled humanity.

There was a telegram from Zanzibar:—

"To John S. Wright, Washington, U. S. A.

"Zanzibar, 23rd September, 7:27 a. m., local time. Discharge took place at midnight from cannon on southern side of Kilimanjaro. Projectile traveled with fearful shriek. Awful explosion. Province devastated by a tornado. Sea risen in the Mozambique Channel. Many ships damaged and driven on shore. Towns and villages annihilated. All well, as usual.—Richard W. Trust, U. S. Consul."

Yes. All well as usual! Nothing changed in the state of affairs except the disasters among the Wamasai caused by the artificial tornado and the wrecks caused by the risen sea.

And had it not been the same when the famous Columbiad had sent its projectile toward the Moon? The shock communicated to the soil of Florida had only been experienced for a hundred miles around. But this time the effect ought to have been a hundred times as great.

Under any circumstances the telegram informed the world of two matters of interest:—

1. The enormous cannon had been made in the flank of Kilimanjaro.

2. It had been fired at the time stated.

And then the world gave a shout of satisfaction, which was followed by an immense shout of laughter.

Barbicane & Co.'s attempt had failed piteously! J. T. Maston's calculations might as well be put in the waste-paper basket! The North Polar Practical Association had nothing now to do but go into another kind of liquidation!

Could it be possible that the secretary of the Gun Club had made a mistake?

"I would rather believe I am deceived in the affection with which he inspires me," said Mrs. Evangelina Scorbitt.

And if there was a discomfited being on the face of the planet it was J. T. Maston. When he saw that nothing had changed in the conditions of the Earth's movement, he was buoyed up with hope that some accident had retarded the work of Barbicane and Nicholl.

But since the Zanzibar telegram he had to admit that the experiment had failed.

Failed? And the equations, the formulæ from which he had deduced the success of the enterprise! Was the gun not long enough, the projectile not heavy enough, the explosive not strong enough? No! It was inadmissible!

J. T. Maston was in such a state of excitement that he declared he would leave his retreat. Mrs. Scorbitt tried in vain to prevent him. Not that she feared for his life, for the danger was over. But the pleasantries that would be showered on the unhappy calculator, the jokes that would rain on his work—she would have spared him.

And, still more serious, what was the reception the Gun

Club would give him? Would they retain him as their secretary after a failure that covered them with ridicule? Was not he, the author of the calculations, entirely responsible for the collapse?

He would listen to nothing. He would yield neither to the tears nor prayers of Mrs. Scorbitt. He came out of the house in which he was hidden. He appeared in the streets of Baltimore. He was recognized, and those whom he had menaced in their fortune and existence, whose anxiety he had prolonged by his obstinate silence, took vengeance on him by deriding him in every way.

The street boys shouted after him, "Go along, old Pole-shifter!" "Hallo, old clock-jobber!" "How's the figuring tinker?"

And a mob gathered and began to hustle him, and he had to seek refuge in the New Park mansion, where Mrs. Scorbitt did her best to console him. It was in vain.

J. T. Maston—after the example of Niobe—would not be consoled. His gun had produced no more effect on the terrestrial spheroid than an ordinary petard.

A fortnight went by, and the world had already forgotten the North Polar Practical Association. A fortnight, and no news of Barbicane or Captain Nicholl! Had they perished in the counter-shock of the explosion, victims to the ravages produced among the Wamasai? Had they paid with their lives for the biggest mystification of modern times?

No. At the explosion Barbicane and Nicholl had been thrown down; so had the Sultan, and several thousand natives; but they had all risen again safe and sound.

"Is it a success?" asked Bali-Bali, rubbing his shoulders.

"Can you doubt it?"

"I—doubt it! But when shall we know?"

"In a day or two!" said Barbicane.

Did he see that the attempt had failed?

Possibly. But he never would have admitted it to the monarch of the Wamasai.

Two days afterward Barbicane and Nicholl took their leave of Bali-Bali, not without paying a good round sum for the destruction done to the surface of his kingdom. And as the money went to his own private pocket, and his

subjects got not a dollar, he had no cause to regret so lucrative an affair.

Then the two friends, followed by their foremen, reached Zanzibar, where they found a vessel starting for Suez. There, under assumed names, they took passage to Marseilles, whence by the P. L. M. and the Ouest they reached Havre, where they went on board the *Bourgogne* and crossed the Atlantic.

In twenty-two days after they left the Wamasai they were in New York.

On the 15th of October, at three o'clock in the afternoon, they knocked at the door of the mansion in New Park.

A minute afterward they were in the presence of Mrs. Scorbitt and J. T. Maston.

CHAPTER XX

THE END OF THIS REMARKABLE STORY

"BARBICANE? Nicholl?"

"Maston!"

"You?"

"We!"

And in that pronoun, spoken simultaneously by the two in a singular tone, there was everything that could be said in the way of irony and reproach.

J. T. Maston passed his iron hook across his forehead. Then in a voice that hissed between his lips he asked:

"Your gallery at Kilimanjaro was two thousand feet long and ninety in diameter?"

"Yes."

"Your projectile weighed one hundred and eighty thousand tons?"

"Yes."

"And you used two thousand tons of meli-melonite?"

"Yes."

The three yes's fell like blows of a sledge-hammer on J. T. Maston's occiput.

"Then I conclude—" he said.

"What?" asked Barbicane.

"That, as the experiment failed, the explosive did not give the projectile the necessary initial velocity!"

"Indeed!" said Captain Nicholl.

"And that your meli-melonite is only fit for pop-guns!"

Captain Nicholl started at the insult.

"Maston!" he exclaimed.

"Nicholl!"

"Will you fight me with meli-melonite?"

"No; with fulmi-cotton. It is surer!"

Mrs. Scorbitt hastened to interfere.

"Gentlemen! Gentlemen!" she said. "Between friends!"

Then Impey Barbicane put in a word very quietly. "What is the use of abusing each other? It is certain that the calculations of our friend Maston were correct, and it is certain that the explosive of our friend Nicholl was sufficient! We followed exactly the teachings of science! And we failed! For what reason? Probably we shall never know!"

"Well," said the secretary of the Gun Club; "we will try it again!"

"And the money which has been lost?" observed Captain Nicholl.

"And public opinion, which will not permit you to again risk the fate of the world?" added Mrs. Scorbitt.

"What will become of the North Pole?" asked Nicholl.

"What is the value of the shares in the North Polar Practical Association?" asked Barbicane.

Oh, what a fall there had been thereof! The certificates could be bought at waste-paper prices.

Such was the memorable fiasco of the gigantic project of Barbicane & Co.

If ever unfortunate engineers were overwhelmed with ridicule, if ever there were amusing articles in the newspapers, caricatures, comic songs, parodies—it was then. Barbicane, the director of the Association, the members of the Gun Club, were literally covered with scorn. The storm of contempt was so thoroughly American that it was untranslatable even in Volapuk. And Europe joined in with such vigor that at last America was scandalized. And then remembering that Barbicane, Nicholl, and Maston were of American birth, and belonged to the famous club of Baltimore, a reaction in their favor set in, which

was almost strong enough to make the United States declare war against the Old World.

But was it ever to be known why the enterprise failed? Did the failure prove that the project was impossible, that the forces of which man disposes will never be sufficient to bring about a change in the Earth's diurnal movement, that never would the Polar regions be displaced in latitude to such an extent that their icy mantle will be melted by the solar rays?

That this was the case appeared undoubted a few days after the return of Barbicane and Nicholl to the United States.

A letter appeared in the Parisian *Temps* of the 17th of October, which did mankind a service in confirming it in its feeling of security.

The letter was the following:—

"The abortive attempt to furnish the Earth with a new axis is now known. Nevertheless, the calculations of J. T. Maston were correctly founded, and would have produced the desired results if by some inexplicable distraction they had not been nullified by an error at the outset.

"In fact, the celebrated secretary of the Gun Club took for his basis the circumference of the terrestrial spheroid at forty thousand metres instead of forty million metres —and that nullified the solution.

"How came he to make such an error? What could have caused it? How could so remarkable a mathematician have made such a mistake? Conjecture is vain.

"There is no doubt that the problem of the change of the terrestrial axis was correctly stated, and it should have been correctly worked out. But the initial error of three noughts produced an error of twelve noughts in the final result.

"It is not a cannon a million times as large as a four hundred-pounder, but a million million million such cannons, hurling a million million million projectiles of one hundred and eighty thousand tons, that would displace the Pole 23° 28′, supposing that meli-melonite has the expansive power attributed to it by Captain Nicholl.

"In short, the effect of the discharge at Kilimanjaro has been to displace the Pole three microns—that is,

one ten-thousandth of an inch, and the maximum effect on the level of the sea must have been just nine-thousandths of a micron.

"The projectile has become a small planet, and henceforth belongs to our system, in which it is retained by the solar attraction.

"ALCIDE PIERDEUX."

So it was some distraction of J. T. Maston's, an error of three noughts at the beginning of his calculations, that had brought this humiliating disaster on Barbicane & Co.

The members of the Gun Club were furious, but among the general public a reaction arose in favor of the poor fellow. After all, it was this mistake which had caused all the evil—or rather all the good, for it saved the world from ruin.

And so compliments came in from all parts, and letters arrived in millions congratulating J. T. Maston on having forgotten his three noughts!

But that extraordinary man, more deeply disgusted than ever, would not listen to the congratulatory world. Barbicane, Nicholl, Tom Hunter with the wooden legs, Colonel Bloomsberry, the brisk Bilsby, and their friends, would never forgive him.

But at least there remained Mrs. Scorbitt!

At first J. T. Maston refused to admit that he had made a mistake; and set to work to check his calculations.

Sulphuric Alcide was, however, accurate. And that was why, when he found the error at the last moment, and had no time to reassure his fellow-men he so calmly sipped his pleasant hot cup of coffee while the spinal marrow was so unpleasantly cool in his fellow-men's backs.

There was no disguising the fact. Three noughts had slipped out of the terrestrial waist!

Then it was that J. T. Maston remembered! It was at the beginning of his labors when he had shut himself up in Ballistic Cottage. He had written the number 40,000,000 on the blackboard.

At that moment came a hurried tinkle from the telephone. He had gone to the instrument. He had exchanged a few words with Mrs. Scorbitt. There was a flash of lightning that upset him and his blackboard. He

picked himself and his blackboard up. He began to write in the figures half rubbed out by the fall. He had just written 40,000—when the bell rang a second time. And when he returned to work he had forgotten the three last noughts in the measure of the Earth's equator!

Now all that was the fault of Mrs. Scorbitt. If she had not bothered him he would never have been knocked down by the return shock of that electrical discharge.

And so the unhappy woman also received a shock when J. T. Maston told her how the mistake had been made. Yes! She was the cause of the disaster! It was her doing that J. T. Maston was now dishonored for the many years he had to live, for it was the general custom to die as centenarians in the Gun Club.

And after the interview J. T. Maston fled from the house in New Park. He went back to Ballistic Cottage He strode about his work-room saying to himself:

"Now I am good for nothing in the world!"

"Not even if you were to marry?" said a voice which emotion made heartrending.

It was Mrs. Scorbitt.

Tearful and distracted she had followed J. T. Maston.

"Dear Maston!" said she.

"Well! Yes!" said he; "on one condition—that I never again touch mathematics."

"I abominate them!" said the widow.

And thus it was that Mrs. Scorbitt became Mrs. J. T. Maston.

As to Alcide Pierdeux, what honor, what celebrity that letter brought both him and his old school! Translated into all languages, copied into all newspapers, it made his name known throughout the world.

It happened, therefore, that the father of the pretty Provençale, who had refused him his daughter's hand because he was too learned, came to read the famous letter in the *Petit Marseillais*. Without any assistance he managed to make out its meaning. And then he was seized with remorse, and, as a preliminary measure, sent Sulphuric Alcide an invitation to dinner.

And so the world was left as it was.

No attempt was made by Barbicane & Co. to resume business. Any attempt would have been futile. Alcide's